Occidental Medical Times.

VOL. IX. OCTOBER, 1895. No. 10.

THE TREATMENT OF GENERAL PERITONITIS DUE TO ENTERITIS—WITH REMARKS CONCERNING THE PATHOLOGICAL CHARACTER OF THE INITIAL LESION.

By G. CHILDS-MACDONALD, M.D., Brux.; F.R.C.S., Ed.; F.R.C.S.E., etc., Sausalito, Cal., Surgeon to the San Francisco Polyclinic.

General peritonitis, as a sequence of enteritis, is of more frequent occurrence than has been usually accredited. The evidence adduced of late years, both clinical and pathological, fully establishes this statement. No doubt such a cause as we are now discussing would, by the older diagnosticians, have been placed under the head of "idiopathic" diseases—that no man's land of medical science.

To understand the rationale of an inflammatory state of the mucous membrane of the intestine causing an inflammation of the peritoneal coat, it will be necessary to review the recent histological and pathological microscopy of the alimentary canal, together with some later bacteriology. Commencing at the pharynx, we find a superabundance of adenoid tissue, the physiology of which has never been accurately demonstrated. Experiments of recent date, more especially those of Sims-Woodhead, and his co-workers, have demonstrated the advantage of these adenoid structures, especially those of the pharyngeal ring, as being due to the lymphoid corpuscular elements. These are, figuratively speaking, the soldiers of the first fort of the alimentary canal, to pass whom the bacilli have to run the gauntlet. Experiments were conducted on pigs and other mixed feeding animals; their food was varied as to its consistency, being made up at different times of solids, semi-solids, and fluids, with an irregular sprinkling of disease germs, special prominence being given to the tubercle bacillus. On slaughtering the infected animals at varied stages of the acquired disease, and after a meal, the adenoid pharyngeal tissues were removed, stained and mounted for microscopical examination. Bacteria in various stages of disintegration were found incorporated in the small lymph corpuscles, while these in turn were imbedded in the large lymphoid cells of the lymph tissue proper.

Lymphoid or adenoid tissue, as we know, is found in the lymphatic glands, simple, compound, solitary, in Peyer's glands, and in the bronchial, pharyngeal, nasal, and intestinal mucous membranes, etc.

There is no doubt, and this point has also been demonstrated, that the lymph tissue of the intestinal tract plays exactly the same part toward disease germs as that of the pharynx. It is by this provision of nature that the various bacteria which are the constant inhabitants of the alimentary canal, more especially the bacterium coli commune, are prevented from entering the blood stream and the peritoneal cavity.

In order that a general peritonitis may be established several factors are required: (1) Mechanical irritation of the mucous membrane by which it becomes abraded, or its vitality lowered, as by indigestable food or foreign bodies; and, in the latter case, by strangulation from a band or a hernia. (2) Chemical poisons, both organic and inorganic, by their injurious effects tend to lower the resisting power of the lymph tissue to the invading germs, provided the poison be not directly fatal to them. (3) Retardation or obliteration of the normal intestinal peristalsis, preventing the gut from casting out its invaders. A great increase in the number of bacilli by which the lymph cells are overpowered, or a diminished number of the defending cells, or their low vitality enable the bacilli to pass into the peritoneal cavity, and by reproducing themselves in sufficient numbers cause a general peritonitis. That the foregoing is the etiology of many cases of peritoneal inflammation, is now a demonstrated fact.

In considering the treatment of this condition, if we could diagnose the initial stage of the disease, unaccompanied by any internal strangulation, the rational plan would be to flush the intestines by some quick acting saline, followed by an antiseptic. Unfortunately the consultant is not called to these cases sufficiently early, as a rule not until peritonitis is definitely established and the patient presents marked intoxication, a condition in which drugs, except stimulants and anodynes, have little or no usefulness. Opium, not morphine, is here of distinct benefit, relieving pain and restlessness, strengthening the failing pulse and permitting the patient to become more tolerant of the generating toxines. It should always be given prior to any operative procedure, which latter alone offers any hope of saving the patient.

The following is a clinical picture of the disease. Peritoneal shock and its accompaniments due to the toxic impression received by the nervous centers and independent of the body temperature, which may be above or below normal, is most prominent. General abdominal pain, variable in amount and tenderness on pressure, to some extent resident in the superficial nerves of the skin (for explanation of this phenomenon, see Hilton on "Rest and Pain"), profound exhaustion, pallor, small quick frequent pulse, cold extremities, shallow thoracic respiration, and an abdomen which may or may not be distended. At times emesis, and constipation. Güber has termed the foregoing phenomena peritonisum. Delirium and headache are present in about 11 per cent. of cases. More often the mind remains painfully clear and the intelligence acute to the end. All these are signs of profound and grave disturbance, which, if the life of the patient is to be saved, calls for rapid and skilful surgical interference.

Shock or its equivalent being present, and as opening the abdomen increases this condition, precautions must be taken to lessen it so far as possible. For this purpose give half to one ounce of brandy *per rectum*, accompanied by $\frac{1}{50}$ gr. of strychnine hypodermically. The best anesthetic is the A. C. E. mixture, which is not so depressing as chloroform, and not so irritating to the bronchial mucous membrane as pure ether. Place the patient on a firm table, surrounded by carded cotton and hot water bottles; this must never be neglected and should be rigidly carried out in every case where the abdomen is to be opened and where we expect the operation to be prolonged. The skin of the abdomen and hands of the operator must be cleansed in the usual manner. It is best to boil the instruments in water containing bicarbonate of soda and some carbolic acid, after which rinse and place in boiled carbolized water ready for use. The room, surroundings, and assistants should be surgically clean. All water used must have been previously boiled. Common cleanliness is all that is required, without any of the elaborate prophylaxis now so much in vogue.

The preparations being completed and the bladder emptied, make the incision in the linea alba midway between the pubes and umbilicus, about 3 inches in length. Before the peritoneum is opened see that towels, wrung out of hot boracic acid solution, are handy, to cover any protruding intestines, enlarge the incision on the fore and middle finger of the left hand upward until the whole hand can be passed into the abdominal cavity and can reach the upper surface of the liver. Next turn up the great omentum; if there be much intestinal distention, puncture with a fine trocar, doing this obliquely. Look for the cecum, and here pick up the small intestines, run them through the finger and thumb of the right hand until you reach the third part of the duodenum. In this manner you can satisfy yourself of the absence of perforation or band. Irrigate the abdominal cavity slowly, but gently, with hot boracic solution, especially the corners, with extra precautions about the region between the liver and diaphragm, below that organ and deep in the pelvis. When the cavity is still fairly full, bring the edges of the wound together with the left hand, use the right hand to press, and rub gently over the whole of the abdominal wall so as to thoroughly wash the viscera, then open the wound and let the excess of fluid drain off, while the remainder is removed by cotton pads covered with cheese cloth.

Having dried the parts, by means of a longitudinal incision, open the gut as high as possible. The opening should be large enough to admit the nozzle of the douche, from which the warm boracic solution passes into the intestines gently; an assistant should help the flow onward by running the canal between his fingers. At the cecum, some difficulty will probably be encountered. In this case, it is better to again open in front of the cecum than to use force. The intestinal contents escape into a suitable receptacle and the flow is continued until the water becomes clear. As soon as this is completed close the intestinal incisions by Lembert's sutures; again thorougly cleanse the viscera and irrigate as before; dry the peritoneum perfectly; be most particular that no fluid is left in the cavity. The question of drainage must be left to the judgment of the operator. If it be decided to drain, use a big rubber fenestrated tube; it is better than glass.

Close the peritoneal wound first by either fine silk or resinized catgut, seeing that all the needles are double threaded if passed from peritoneum to skin. Close the remainder of the wound with interrupted silk worm gut sutures, using a straight triangular needle passed from within out. Dress the wound with iodoform gauze, held in place by a many-tailed bandage; remove the patient to a cot bed and surround him with cotton and hot water bottles. Thirst, after operation, is best treated by sips of hot water, which relieves this distressing symptom, while it acts as a stimulant. Nothing beyond this must be taken by the mouth for the first 24 hours, but nutritive enemata may be used as indicated. Hypodermic injections of stimulants and strychnine are often needed and general medical care called for, according to the exigencies of the case.

In conclusion, I may add that, to be successful, the operation should be done sufficiently early, and not left until the patient be half moribund, as unmerited blame may consequently be cast upon a worthy surgical procedure.

THE PROGRESS OF SURGERY DURING THE PAST YEAR.

By P. T. PHILLIPS, M.D., Reno, Nev.

Read before the Nevada State Medical Society.

During the last twelve months the progress of surgical science and the improvement in surgical art and methods have been steady. There have been no wonderful discoveries revolutionizing any of its departments as serum-therapy has the practice of medicine, nevertheless the advancement has been decided. I think I can best interest the Society by selecting a few of the more practical subjects which have been most prominent before the profession during the last year, endeavoring to condense the opinion of recognized authority *pro* and *con*, and giving the results attained under methods of treatment.

Immediate Amputation After Injury.

At a meeting of railway surgeons in New York City, in 1894, this subject was thoroughly discussed, such men as Dr. Estes, of Bethlehem, Pa., and Dr. Murdock, of Pittsburg, Pa., eminent and experienced in railroad surgery, taking part in the discussion. From the experience of those present it was conclusively proved that the best results were obtained by operating just as soon as the patient reacts from the trauma, and before septic processes are established from necrosis or crushed tissue, this period varying from a few minutes to 48 hours. Surgical shock is undoubtedly made up of two elements—primary or immediate, and secondary or sequential, the first being purely psychical and coincident with or precedent to the injury; the second, due to loss of blood. The first is an element of small consequence in its production compared to the second; so, if the patient has lost but little blood and is in good physical condition the operation should be done as soon as he can be prepared for it. It seems from this conclusion that in all injuries the loss of blood should be prevented as much as possible. Railroad employes should be drilled in methods to control hemorrhage at times when a surgeon is not present. Some railroad systems supply each train and station with rubber tourniquets.

It is well in this connection to consider the value of venous injections of normal saline solutions in restoring a patient from shock produced by excessive hemorrhage or in preventing collapse where hemorrhage is unavoidable. This procedure was first used and brought prominently before the profession by Prof. Dawbarn, of the New York Polyclinic, and reported in the *Annals of Surgery*, 1894. The *modus operandi* is as follows: Use boiled water, allowing it to cool to 110° F. If the thermometer is not at hand the temperature should be as high as the hand can be immersed in without discomfort. A teaspoonful of salt to every pint is dissolved in the water to be used. The apparatus for using the injection is very simple: A small glass or metal pipette is inserted in a vein, ordinarily of the arm, a rubber tube connects this with an irrigator or fountain syringe containing the amount of solution to be injected. Care must be taken, of course, to exclude air. Although cold water has been used successfully, it had best be warm, as it does not rob the body of any of its natural heat. From one-half to one pint may be allowed to enter at one time, and the effect determined upon the circulation before more is used. As much as five pints has been injected in one case with most gratifying results, bringing the pulse down from 120 or 130 to 70 or 80.

Murphy's Button.

When this ingenious device was first brought to the attention of the profession by its inventor, Dr. John A. Wyeth (of New York) ventured the assertion that its most useful employment would be in forming an anastomosis between the gall bladder and small intestines in occlusion of the common bile duct, and that like Senn's bone plates, and the vegetable plates of Dawbarn, it would not produce as good results in competent hands in intestinal anastomosis as the careful suture. I think that subsequent experiment has justified this statement. A careful study of case reports and literature during the year 1894 shows a tendency on the part of surgeons to discard mechanical inventions and return to suturing in the repair of the intestines. I do not mean to convey the idea that the Murphy button is useless, for I have seen it used successfully in several cases, but simplicity in surgery, as in other things, seems to offer the best results, and the simplest method that can be used is the Czerney-Lembert silk suture with which we are all familiar.

Enlarged Prostate.

The surgical treatment of prostatic hypertrophy, always a topic of interest, is entitled to renewed attention by reason of several operative procedures that have been advanced within a recent period. In view of the fact that one man in every three, past the age of 54, has some enlargement of the prostate, the importance of this subject is evident. The first operation is the method of Bier, who cuts off the blood supply to the bladder and prostate by ligation of the internal iliac arteries, thus by one ligation cutting off the internal pudic, middle hemorrhoidal and inferior vesical. This operation seems entirely too formidable to justify its repetition, and the eight or ten cases thus operated upon bear out this conclusion, as only two have improved, and the mortality from the operation was over 50 per cent. There are other operations which risk less and seem to promise more.

In June, 1893, Dr. J. W. White, of Philadelphia, in an address at the annual meeting of the American Surgical Association, suggested castration as a remedy for this serious lesion. Dr. White's operation is based upon the theory that while "the prostate is not embryologically the true homologue of the uterus, it is developed from structures quite distinct from those which form the urinary apparatus, and the growth of the organ is in direct relation to the sexual life of the individual, its over-growth occurring at a period when the sexual life is fading out, but not extinct." Moreover, he argued, that tumors of the uterus underwent atrophy after the cessation of the menstrual function, and that the removal of the ovaries caused prompt atrophy of uterine myofibromata.

Upon this theory the operation has been carried into effect in 23 instances, that have so far been reported, all uniformly successful in reducing enlargement of the prostate, and with no deaths. If further experience should prove that removal of the testicles diminishes hypertrophy of this organ, and wholly, or in great part, relieves the obstruction to the outflow of urine, it is entitled to serious consideration as a proper operation. The question to consider is one of importance to the patient alone—if he be willing to submit to the sacrifice of these organs, it becomes an affair of his own, and justifies the surgeon in its performance. If the normal channel of the urethra can be restored by this operation, it will achieve a result certainly more comfortable to the patient, as far as the management of his bladder is concerned, than any other procedure for prostatic hypertrophy with which I am acquainted.

The third operation, one that I saw performed in New York last year by Dr. Wyeth and others, is suprapubic cystotomy. This high opening into the bladder enables the surgeon to remove the enlarged middle portion, which acts like a ball valve to the urethra. The fact that the operation is done at an advanced period of life and at a time when the patient is suffering from debility from bladder trouble with kidney complications, which so often coexist, does not render it free from danger, but it is a comparatively safe operation. It is necessary, in some cases, to establish a permanent suprapubic fistula as the bladder has become so weakened from continual overdistention, that it is pouched and will not empty itself. A soft rubber catheter may be fastened in this, which will empty into a urinal worn on the inside of the thigh.

Just one word here concerning supra-pubic cystotomy. Its simplicity and the little danger attending it makes it preferable, in my opinion, to the perineal operation, in all cases where it is necessary to open into the bladder. After distending the bladder sufficiently with air or water, through the urethra, the patient is placed in the Trendelenburg position, which causes the intestines, with their peritoneal covering, to fall back, giving from one to three inches between it and pubis, which is amply sufficient to reach the bladder.

The bladder may be drained by siphon or aspirated with a syringe through the opening.

Treatment of Cutaneous Malignant Epithelioma.

It is a recognized fact that no one has given to this subject the amount of scientific research that Professor A. R. Robinson, of the New York Polyclinic, has bestowed upon it. He has spent 12 consecutive years in the German hospitals, in the study of dermatology, and the eminent dermatologist, Dr. Taylor, said there was no better authority in the world. Dr. Robinson has proved, to his own and his associates' satisfaction, that no treatment is equal to the application of caustic agents. He is in the habit of using the paste we all know as Marsdens', which consists of equal parts of arsenious acid and gum acacia in a modified form. He increases or diminishes the acid to suit the case, and adds a sufficient amount of a 4 per cent. solution of cocaine to deaden sensibility. The paste may be left on from 30 to 36 hours, according to the amount of necrosis it produces. There are other caustics that are equally successful and are not so poisonous as the arsenic preparation, and they have a better influence on the patient's mind, as he is sure to ask, "Does the salve contain arsenic?"

The following is a good example:

Equal parts of Chloride of Zinc, Pulverized Sanguinaria C., and common Flour. Moisten with Aromatic Sulphuric Acid or Egg Yelk, and apply on a cloth.

This destroys the cell life, after which the following is applied to separate and remove the dead tumor:

Pulverized Hydrastis C., 1 oz.; Pulverized Sanguinaria C., ½ oz.; Beeswax, 4 oz. Melt together, and add a sufficient quantity of Olive Oil.

To heal the remaining wound use oxide of zinc ointment.

This latter process has been used successfully by my brother, Dr. W. A. Phillips, and myself, in several cases during the last two years. One, especially, being a large epithelioma, the size of an orange, situated upon the shoulder of a well-known physician of our State, which was removed with comparative comfort eighteen months ago and there has since been no sign of recurrence.

I notice in an address on surgery, delivered by Dr. John A. Wyeth, before the Tri-State Medical Association, at St. Louis, April 4, 1895, that in speaking on the subject, he says this class of cancers have been successfully removed by caustics from every part of the body except from the oral cavity. It is, therefore, probable that I have to report from Nevada the first case of this kind successfully treated.

In April of this year, a lady of Reno consulted her family physician, Dr. W. A. Phillips, about a bunch situated in the roof of the mouth, upon the hard palate, the size of a lima bean and rapidly growing. It was immediately diagnosed by the doctor as a malignant epithelioma. As the family were inclined to be sceptical as to its being a cancer, Dr. Phillips called in Drs. Hogan, Lewis, and myself as consultants. The diagnosis was confirmed by all. A section was also taken to Prof. Miller, of the State University, the microscopist of this Society, for examination. He pronounced it a malignant growth without doubt. The consulting physicians all advised Dr. Phillips to remove the growth at once with the knife, but he, being familiar with the use of caustics, and the family being averse to operative procedures, determined to first try this treatment.

The next question was how to apply it. He finally had an ordinary upper plate made by a dentist from an impression taken from her old plate and a cavity made therein large enough to contain sufficient paste held on cloth to surround the tumor. The cavity had a screw plug in the bottom so the secretions could be removed without removing the plate. The zinc chloride paste was applied, the plate remaining *in situ* by suction. It was found necessary to increase the amount of zinc 40 per cent., before it was strong enough to destroy the growth, which it then did satisfactorily. At present there only remains a scarcely perceptible scar, over which she wears her ordinary plate without discomfort or the least sign of recurrence.

The reason of the caustic treatment being more successful than the knife is regarded as largely empirical, but is generally based on the fact that the caustic follows up the so-called "cancer roots," which are, in fact, the local chain of lymphatics and destroys the cancer cells found there. The reason that the caustic should destroy the cells, while not affecting normal tissue, is easily explained by their lower vitality. The surgeon, in using the knife, will often cut across these lymphatics and thus leave cells which will ultimately reproduce the old trouble.

I think in this review I have touched on the most-talked-of topics in the surgical world since our Society met six months ago, and I hope the discussion that will follow this paper will be both critical and exhaustive.

Nevada Bank Building.

SURGERY OF THE GALL BLADDER AND GALL DUCTS.

By THOS. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

The surgical status of the gall bladder has been firmly established during the past two decades. The matter has been so thoroughly exploited by many authorities, that little can be said which will add fresh interest. In selecting this subject for the evening's discussion, it was with the idea to review briefly its main features, calling special attention to some of the modifications, in *technique*, which are comparatively of recent date.

The usual conditions demanding surgical interference with the gall bladder are, the presence of gall stones in the bladder, closure of the cystic or common ducts by the impaction of gall stones, by pressure from malignant growths in the liver or pancreas, or by chronic catarrhal inflammation in the ducts. The operations which have been devised for the relief of these conditions are, cholecystotomy, cholecystectomy, cholecystenterostomy, and cholecystotomy with immediate closure of the gall bladder. Under certain conditions, each of these operations may be resorted to with propriety.

Cholecystotomy has, in the past, been the favorite procedure with by far the greater number of surgeons. The gall bladder, after having been emptied of its contents, was attached to the skin wound. This resulted very frequently in permanent biliary fistula. More recently the operation has been improved, by attaching the gal bladder to the parietal peritoneum. This leaves a broad margin above the gall bladder opening, for the formation of granulation tissue, and ultimate closure of the fistulous tract is more liable to occur. Richardson insists, that with patent cystic and common ducts, a permanent biliary fistula should never occur; this, however, is not borne out by the experience of others.

Cholecystectomy is only applicable when the surgeon is absolutely certain, that the common duct is patent; this being the case, the absence of the gall bladder appears to have little influence upon the well being of the patient. The operation is accomplished by separating the viscus carefully from its attachments to the liver, carrying the dissection well up to the cystic duct. This is then encircled by a ligature, and the gall bladder cut away.

Although cholecystenterostomy had its advocates early in the history of these procedures, it was rarely resorted to until Murphy announced a successful series of experiments upon lower animals, and subsequently upon men, with the anastomosing button which bears his name. There can be no doubt that this appliance, used experimentally, upon the normal viscus of a healthy animal, will fully meet the expectations of the most sanguine. But in my opinion it will require longer time, and the accumulation of more evidence, to establish the value of this apparatus in this connection. Very often where cholecystenterostomy is demanded, the walls of the gall bladder will be found thickened and friable, and seemingly unfit for such manipulation as is rendered necessary in the use of the button. Anastomosis between the gall bladder and the intestine, has also been successfully accomplished by the suture method, and it must remain a matter of discretion whether the button or suture will be employed in those cases where there is permanent closure of the common duct, for it is to these cases that this plan of attack is particularly adapted.

At the recent meeting of the American Surgical Association, J. W. Elliott, of Boston, advocated immediate suture of the gall bladder wound. After freeing the sac of its contents and establishing the patency of the cystic and common ducts, when the latter condition can be obtained, there is little doubt that we have in this operation, the ideal method of dealing with the gall bladder. In closing the wound, Lembert's suture is employed. Where there is a reasonable doubt as to the patency of the ducts, the gall bladder may be attached provisionally to the parietal wound. This will afford ample opportunity for determining the propriety of ultimate closure of the gall bladder wound.

Among the most embarrassing and formidable complications in procedures involving the gall bladder, is the presence of an impacted gall stone in the cystic or common duct. Numerous ingenious instruments were devised for extracting such bodies, but the difficulties surrounding the undertaking were found to be insuperable. Crushing of such stones *in situ* was practised by a few operators, but the procedure was a hazardous and unsatisfactory one. Elliott, in the paper above alluded to, contends that impacted gall stones may be removed by incision and immediate suture of the walls of the duct. Probably no other plan will so fully commend itself to the surgeon of the future.

One factor in successfully dealing with this department of surgical work cannot be too strongly emphasized. I refer to the necessity for early operative interference; the time has come when we may assure the sufferer of comparative immunity from danger in early operation. The hazard increases rapidly as the case progresses, and those operations done as a last resort are attended with a high rate of mortality.

I have operated upon the gall bladder four times. Without going into a formal report of each case, my results are as follows: *Case I.* A button operation in an old man, who was at death's door, having suffered from gall stones many years; he survived the operation but ten hours. *Case II.*—A woman, 58 years of age, from whom I removed simultaneously an ovarian tumor and a dozen gall stones, from which she also had suffered for many years. In this case the viscus was attached to the parietal wound provisionally. A permanent biliary fistula resulted, and as there was no indication of bile pigment in the fecal matter, I attempted some months later to find relief through the anastomotic button. The patient was in bad condition at the time of the second operation, and died at the end of five days. *Post-mortem* examination revealed the fact that the anastomosis was complete, with the button still in place. *Case III.*—A woman, aged 35, who had long suffered from catarrh of the common duct. The gall bladder was greatly distended, and the pain was intense. Diagnosis previous to operation was not positive. The gall bladder was attached to the integument. The patient made a quick recovery, and is now living a comfortable existence, with a permanent biliary fistula. *Case IV.*—A man, 45 years of age, who was nearly dead as a consequence of an impacted gall stone, he having suffered from hepatic colic for many years. In this case the gall bladder was attached imperfectly to the parietal peritoneum. About the gall bladder was packed a considerable amount of iodoform gauze, which served as a drain, protecting the peritoneal cavity. Recovery was uninterrupted, but the man, now four months after the operation, presents a small biliary fistula; the fecal matter is stained with bile pigment, and the patient is in excellent condition. He reports that only a small amount of bile escapes through the sinus, and believes that the channel will close spontaneously in a short time.

426½ J street.

TREATMENT OF TO-DAY FOR TYPHOID FEVER.

By E. J. Boyes, M.D., Oakland, Cal.

There is to-day no specific treatment for enteric fever. Intelligent nursing is of the very first import. The patient should go to bed on the first suspicion of the disease, and remain there continuously till convalescence is well established. A room should be chosen, of good dimensions, light, quiet, and well ventilated. All unnecessary furniture should be removed, and the temperature should not average over 65° F.

Dejecta should be thoroughly disinfected with chloride of lime and promptly disposed of, while scrupulous cleanliness must be insisted on in everything in connection with the sick-room. The diet should be nutritious and easily digested, given often in small quantities, say every two hours. Milk takes first place, and is to be given to the extent of one to two quarts in 24 hours, and it is usually desirable to modify it with lime-water, barley-water, or seltzer, to prevent undue coagulation. This should be cautiously reinforced several times daily by beef-juice broths, or white of egg in water; and possibly by peptonized milk. Jelly every other day. Thus we may be fairly assured the patient receives sufficient and appropriate nourishment. Water in abundance should not only be allowed, but its use should be insisted on, whether solicited or not. It should invariably be boiled, at least 20 minutes, and allowed to cool.

The mouth and teeth should be kept sweet and pure by the frequent liberal use of such washes as listerine in solution. Abbott's thymol comp. tablets make a very convenient and excellent solution for this purpose.

Treatment by means of drugs should be conservative, but the following points will prove of value when the indications are in line. The use of calomel, in fractional doses, in the initiatory stage is a good measure and is not contraindicated by diarrhea. When the condition of the tongue, tympanites, restlessness, etc., suggest digestive inability, the remedy can do nothing but good and will bear repeating, with seidlitz salt to aid in thorough cleansing of the bowels. Success will largely depend on keeping the canal clear, as this one procedure obviates the absorption of more and more of the rapidly forming toxines. Add to this measure the use of such an efficient non-irritating intestinal antiseptic as sulpho-carbolate of zinc, in average adult doses of 2½ grains every 3 hours, and the drug indications are largely met.

Still there is one point remaining, a point of paramount importance in view of the grave tendency to degeneration of the vital powers and of the nervous system in typhoid. I refer to the early use of such vitalizing tonics as strychnine and digitalis. The strychnine should be given almost from the first, preferably in the form of the arseniate, in doses sufficient to induce and maintain tonicity in the individual. So with digitalis, where at all suggested by cardiac ennervation.

High temperature should be dealt with by means of water, internally and externally; then cold sponging, the cold pack or the Brand method of tubbing are very valuable. A convenient and efficient method for reducing temperature is by making a tent over the bed and hanging ice in small pails around the margin of the frame. This idea can be adapted to any case very rapidly, and can be made most serviceable in high fever. Occasionally it is desirable to give a few doses of phenacetin, 5–15 grs., combined with caffeine citrate, grs. i. And when restlessness is a feature, add also camphor monobrom, ½—2 grs. A good combination in high enteric fever is the alkaloidal granule: aconitine, $\frac{1}{134}$ gr.; strych. arseniate, $\frac{1}{134}$ gr.; digitalin $\frac{1}{67}$ gr. One every half hour till effective; then every two hours.

For diarrhea, a good tablet is the zinc sulpho carbolate compound of Abbotts: zinc sulpho carbolate, gr. i; codeine sulphate, ¼ gr.;

hyoscyamine, gr. $\frac{1}{250}$; strychnine sulphate, gr. $\frac{1}{134}$. One every hour till relieved.

For hemorrage, ergotine hypodermically and *per os* is required. Digitalin and hamamelin may be added with decided benefit. Ice cold compresses are useful, and cold drinks in small quantities with, of course, absolute rest.

Perforation calls for heroic doses of morphine pushed to the point of tolerance, even reducing respiration to twelve per minute. Nothing through the mouth should be given except ice. Hypostatic congestion is very unlikely to occur if the respiratory and cardiac functions are stimulated by digitalis and strychnine, as already suggested. At the same time, care should be taken to change the decubitus from time to time.

Convalescents in typhoid require strict limitations in the matter of food and exercise. Ordinary food should be very gradually resumed, adding from day to day poached eggs, milk toast, meat jellies, well boiled rice, corn starch, raw oysters, sweet-breads, custard, etc.

A week should be spent in bed after the temperature has become normal. Finally, it is essentially true that "the best treatment for typhoid is a good physician."

13 Clay street.

METHYLIN-BLUE IN THE TREATMENT OF GONORRHEA.

By THOMAS H. MANLEY, M.D., New York.

Methylin-blue is one of the anilin dyes, a bye-product of coal tar, of late years largely employed in the arts and industries to displace indigo and other agents used in staining and blending colors. In medicine, it has been chiefly employed in the laboratory for staining in making microscopical specimens, chiefly bacterial.

It is a powerful astringent, and at one time was supposed to act with specific energy on malignant growths, particularly the sarcomata. It possesses great energy in staining many of the bacteria. It is generally stated that the anilin dyes stain only nuclei and bacteria, but my own experiments have convinced me that methylin-blue does much more. Some have claimed for it high bactericidal powers, and it was probably on this assumption that it has been employed in the neoplasmata.

Dr. Austin Flint, in a valuable contribution[1] on the treatment of filaria sanguinis hominis, reported the prompt action of this substance when employed in one or two grain doses. Its salutary action was demonstrated, both by the rapid improvement of the patient's general condition and the entire disappearance of the germ from the blood, in a case of chyluria. From his experience with it in the destruction of the plasmodia in the blood, Dr. Flint was led to believe that it probably possessed active bactericidal powers on other germs, and might be employed with advantage in gonorrhea. His experience here was limited to a few cases only, which he believed promptly yielded to methylin-blue, in two grain doses. This was followed by 20 to 30 grains of powdered nutmeg, given to overcome the tendency to vesical tenesmus, which so commonly follows its administration.

---

[1] New York Medical Journal, June 15, 1895.

In every instance, he noticed that the kidneys early commenced the work of elimination, and within a few hours after its ingestion, the urine was stained a deep blue. It was presumed that the staining substance penetrated the mucosum in such a manner as to reach and destroy the specific cocci of gonorrhea.

Experimental and Clinical Data.—Being engaged with a series of experiments on the corpuscular elements of the blood at the time this contribution appeared, it occurred to me that it might be a question of simple demonstration whether methylin-blue was a safe and active bactericide; and if so, how it acted. Does it act directly through the blood on the secreting epithelia of the mucous follicles, or through the urinary excretion, free, or in combination with the inorganic salts, as they pass through the urethra?

This anilin dye, when taken in solid form by the mouth, is promptly thrown off by the kidneys, almost alone. It is not eliminated by the sudoriparous glands, nor does it appear to be taken up from the blood by the mucous membrane of the intestine; if so, it is destroyed by decomposition, as there is usually but little trace of it in the alvine discharge.

I have found the urine of a deep indigo blue after the administration of methylin-blue in 1 grain doses. With this colored urine, I was able to readily stain the staphylococci and streptococci, and any of the class of hyphomycetes. But, in all these bacteria so stained, unless the specimen was passed through the flame previous to applying the coloring matter, active movements of the bacteria could be distinctly seen, although their mantle was deeply colored.

In a specimen of urine secured, under peculiar circumstances, from a female who was suffering from vaginitis, and who had been taking methylin-blue, although the bacteria found in it were deeply stained, they yet possessed active movements. In order to verify this fact, the specimen of urine was given to Dr. Louis Heitzman, of New York, and he, in his father's laboratory, observed the same phenomena on every slide examined.

Possibly, after a course of treatment, the destructive action on the bacteria might be more pronounced, and if we were assured that it were efficient in gonorrhea, without serious detriment to health, there seems no reason why it should not equally be employed in any other condition of infection dependent on bacterial invasion.

In 1 grain doses, repeated three times a day, it sometimes provokes acute vesical irritation, with tenesmus and strangury. In a case coming under my care, inability to urinate was complete, after two doses. Such an irritating substance, in its passage through the renal tubules, must produce nephritic irritation, with possible tendency to complete suppression of function.

How Absorbed and How Eliminated.—In a series of experiments on the frog and turtle with a view to determine the immediate action of methylin-blue on the hematic elements and the protoplasmic corpuscles, I was enabled to study in detail, and with considerable precision, the manner in which this drug is taken up by the blood, and its general effects on the circulatory system.

With a frog weighing a little more than an ounce, I gave in solution one twenty-five hundredths ($\frac{1}{2500}$) of a grain of methylin-blue by the mouth. Its depressing effect on the heart and general circulation was most marked. Within three minutes after its administration the blood current slackened, and in many areas capillary stasis was complete. In ten minutes the movement of the blood in the arterioles and primary capiliaries was so slow that it was possible to differentiate the corpuscles and to watch their movements in detail. The plasma was unstained, but freely floating in it numerous granules or dioplets of methylin-blue were seen. I examined closely to see if this coloring material had stained the nuclei in the moving red corpuscles, but, from my observation so far, I am satisfied that it will not in the living state.

The flat epithelia of the surface, their basal substance and nuclei, were so deeply stained as to appear with the most remarkably clear effect. Even the cornea of the eyes showed a distinctly bluish tint on their entire periphery. These, we know, are without blood-vessels, and entirely nourished by the plasma coursing through the intercorpuscular spaces.

From repeated experiments undertaken to determine the manner in which methylin-blue is diffused through the system, it was quite evident that it is taken up by the absorbents unchanged, and then transferred direct to the plasma. The corpuscles and the hemaglobin generally resist its action. It is carried by the circulation to and is chiefly eliminated without alteration by the kidneys.

While the mucous membrane of the bladder is impervious to many of the vegetable poisons, and is proof against their absorption, any mineral, irritating, or corrosive substance will seize on the epithelial elements and provoke an inflammation. This is what occurs when methylin-blue is eliminated from the system by this route, and as I have found it in three cases, is one of the most serious objections against it.

Mode of Action.—Although it has been clearly demonstrated that this dye does not directly destroy every type of bacteria, nevertheless, if, as stated by reliable authority, it promptly extinguishes the vitality of the filaria sanguinis hominis and aborts gonorrhea, this does not militate against the probability of its exercising a potent influence as a curative agent.

It is well known that iodoform is inocuous as a germicide, directly applied to a lesion, and only imparts its energy when its decomposition commences. Methylin-blue, if a germ destroyer in gonorrhea, probably acts in two ways: (1) Through the plasma of the blood in the act of elimination through the mucous follicles directly and as an inhibitor. (2) By the discolored urine, as it washes or irrigates the urethral surface in the course of its expulsion from the bladder.

There is yet another way by which its salutary effects may be realized, viz., by "substitution," or the superinduction of one inflammation for another; a sort of revulsion, commonly employed over the serous membranes, and of well known merit in inflammation of the mucous membranes. An active irritation is provoked with a consecutive congestion and a mild type of inflammation, which in some unknown manner induces prompt arrest of specific diseased processes, with a succeeding resolution, amelioration of the symptoms, and restoration of function.

It is chiefly on this principle that we must explain the remarkable effects of the modern treatment of gonorrhea by weak but large injections of permanganate of potash. These are employed in such a diluted form as to be quite impotent in germicidal action.

In all cases in which we employ specific remedies for urethral discharges, unless a microscopical examination of the secretions has been made, and the diplococcus of specific inflammation demonstrated, it is useless and misleading to claim for them special value in gonorrheal inflammation. It is now a well recognized fact that many varieties of even contagious urethritis are dependent on an infection, which, though pathogenic, is not gonorrheal, and is usually curable by the simplest medication.

115 West Forty-ninth street.

MEMORANDA.

Poisoning from the Local Application of Acetanilid.

The following case seems to possess sufficient interest and value to warrant report: An infant, born May 5, 1895, was circumcised a week later—the 12th. On the 13th I was called on account of slight hemorrhage, which, however, had ceased before my arrival. The condition of the wound, to all appearance, was normal, but, as the rabbi had left no antiseptic application, I ordered a small quantity of acetanilid to be used locally. Twenty-four hours later I was summoned in haste to see the child. It had turned blue, according to the nurse's account, during the latter part of the night, and in the morning was deeply cyanosed. The blueness was extreme and the expression "pinched." The extremities were cold, but unfortunately the temperature was not taken. Suspecting the powder as the cause of these remarkable symptoms, the nurse had carefully washed it off in the early morning. For once her *post hoc, propter hoc*, instincts were undoubtedly correct. The infant was kept warm, and the next morning the cyanosis had nearly disappeared. By noon recovery was complete. W. A. BRIGGS, M.D.

Sacramento, Cal.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal.,

HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal., and

WM. FITCH CHENEY, B.L., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

The Walscher Position for Labor.—It has long been known that there is a certain amount of mobility in the joints of the pelvis, especially during pregnancy. But it remained for WALSCHER, in 1889, to show that the antero-posterior diameter of the pelvic inlet is not of a constant length, but varies with the position of the body. The sacro-iliac synchondroses are true joints with synovial membranes, articular cartilages, and strong supporting ligaments. The innominate bones revolve to a limited extent about the sacrum, upon an axis passing through the sacrum several centimeters below the level of its promontory, and Walscher found that when the pelvis was, as it were, extended, the conjugata vera was from 9 to 15 millimeters longer than when it was flexed upon the trunk. The universal position of a woman, when forceps are applied, has been upon the back or side, with the thighs flexed upon the abdomen. In this position the symphysis pubis approaches the promontory of the sacrum, and the true conjugate of the pelvic inlet is shortened 6 or 7 millimeters. On the other hand, if the thighs are forcibly extended, as in the position recommended by Walscher, with the patient upon her back and her lower extremities hanging down over the edge of a table or bed, considerable traction is exerted upon the anterior portion of the pelvis; it is forcibly extended, and the conjugata vera is lengthened 6 to 8 millimeters. The increase in length, therefore, of the antero-posterior diameter of the pelvic inlet in the Walscher position over that in the position universally assumed, is from 1 to 1½ centimeters. By placing women in this position in the first stage of labor, Fehling and others have secured spontaneous births in cases where forceps or other instrumental means had been necessary in previous labors. It must be borne in mind, however, that the Walscher position is of value only when the head is at the superior strait. After a head has entered the pelvic cavity, this position should be dispensed with, as by the sinking in of the lower and of the sacrum and coccyx, the anterior-posterior diameter of the pelvic outlet is shortened.—*American Gynecological and Obstetrical Journal*, August, 1895.

The Ante-partum Douche Does Harm.—Many who do not consider it necessary to give vaginal douches before or after a normal labor, still think it necessary to disinfect the vagina before, and, perhaps, after instrumental delivery. It is a common belief that microörganisms introduced into the vagina of a pregnant woman by cohabitation, vaginal douches, etc., weeks or months before the end of gestation, find conditions there favorable for their continued existence, and can infect her during or after labor. To settle this point, Krönig, of Leipsic, introduced various kinds of pathogenic germs into the vaginæ of a considerable number of women during the later months of pregnancy, and afterwards, at various intervals of time, made cultures from the vaginal secretions. In every case he found that these pathogenic germs were destroyed by the vaginal secretion and disappeared, and the longest time required for this destruction was but two days. Krönig concludes that we can always consider the vagina of a pregnant woman to be aseptic in 48 to 72 hours after the introduction into it of any foreign substance, and that the vaginal secretion is a powerful antiseptic agent. Krönig also investigated the effect of vaginal injections upon pathogenic germs in the vagina. One hour after introducing such germs, he irrigated the vagina with two quarts of lysol solution. Cultures made from the vaginal secretions subsequently, at the same intervals of time as in the former experiments, showed that in no case was the number of germs materially decreased by the antiseptic injections. On the other hand, it was evident that vaginal douches of antiseptics lessened the natural immunity of the vagina. For instance, in the 10 pregnant women whose vaginæ were injected with the staphylococci, and then syringed out with lysol, the average time taken by the vaginal secretions to destroy the germs was just twice as long as when no antiseptic injections at all was used.—*American Gynecological and Obstetrical Journal*, August, 1895.

Inflammation of Cervical Glands.—This is met in children oftener than almost any other disease. The etiological factors are numerous. Inflammatory processes about the mouth, face, head, and ears, such as ulceration of a tooth, stomatitis, tonsilitis, or any of the diseases of mucous membranes, eczema of the face or scalp, dermatitis, otitis media, pediculosis capitis, and other diseases too numerous to mention, are frequent causes. There is always danger of a simple adenitis becoming tubercular. A healthy gland has a resisting power to the growth of tubercle bacilli, but when diseased it very readily becomes a nucleus for their cultivation. The source of infection is the same as in the simple variety. There is some abrasion or disintegration of the skin or mucous membrane through which the bacilli gain entrance to the lymphatic vessels, and are carried to the gland. As long as the bacilli are confined to the lymphatic glands there is no danger of general infection, but when they pass these filters, and the germ gets into the general circulation, there follows general tuberculosis, usually pulmonary. The treatment of simple adenitis comprises removal of the cause, if possible, and then rest, and the application of cold to the swollen glands. Local irritants, such as the tincture of iodine, are to be avoided. If suppuration occurs, hot fomentations should be used, followed by incision. The tubercular variety requires thorough excision of the diseased glands, with constitutional treatment by cod-liver oil, arsenic, iron, etc.—*Medical and Surgical Reporter*, July 27, 1895.

Fever in the Newly Born.—L. EMMET HOLT says that during the past five years, very extensive observations upon the temperature of newly born infants, extending to upward of 3,000 cases, have been made at the Sloane Maternity and Nursery, and Child's Hospitals, New York. These have established the fact that it is not uncommon for the newly born infants, during the first five days, to have a rise of temperature to 102° or even 104° F., which is accompanied by no evidence of local disease, and ceases, in nursing infants, with the establishment of the free secretion of milk. It is also arrested by artificial feeding, and very often by water, if freely given. The fall in temperature is often quite rapid, frequently dropping to the normal in a few hours, after having lasted for three or four days. The symptoms presented by those infants were a hot and dry skin, marked restlessness, dry mouth, and a disposition to suck vigorously anything within reach—everything indicating great thirst. The treatment is simple: Give water regularly every two hours, in quantities up to an ounce at a time, if required by the thirst of the child. In case the temperature does not at once begin to fall, the infant should be put upon another breast, or artificial feeding begun.—*Archives of Pediatrics*, August, 1895.

A Case of Birth after Death of the Mother.—The following case is related by A. GREEN: "A girl, 20 years old, in the last month of pregnancy, died suddenly with general convulsions. Two hours after death she was laid out on a bed by two women and covered with a sheet. Fifty-three hours afterward an autopsy was made at the direction of the Court. There was then found between the thighs of the girl a fully developed child, with the back upward, the chin on the breast, the legs extended at the knees, but flexed at the hips, with the feet near the chin. The fundus of the inverted uterus was visible outside the vulva, with the placenta hanging from it. The navel cord was uncommonly short. After removal of the placenta the uterus was replaced, but the intra-abdominal pressure immediately expelled it again. There was a considerable laceration of the perineum, but no sign of blood on the bed. The body was already in a condition of advanced decomposition."—*Lancet.*

The Slipping of Obstetric Forceps.—DR. E. A. TUCKER, of the Sloane Maternity Hospital, New York, says if the forceps slips when properly applied it means that the case is not adapted for delivery with forceps; *i. e.*, the forceps is contraindicated, and its further use will result only in doing harm. Fenestrated forceps blades slip just as badly as do solid blades, if the head is too large; any forceps will slip if it does not fit the head. If the forceps slips while strong traction is being made, the child's skull will surely be fractured. If the child must be born head first, because version is impossible, and if forceps cannot deliver, the cephalotribe is the best instrument for obtaining a hold on the head firm enough to accomplish delivery. Oscillation will cause advance when straight traction fails.—*Medical Record*, September 7, 1895.

The Uselessness of the Vaginal Douche in Normal Labors.—LEOPOLD, who has previously written much against the use of the vaginal douche in normal labor cases, gives, in his latest paper on the subject, some comparisons between two groups of cases observed in different obstetric wards. He reports 407 normal cases, where the douche was not used during the puerperium, in contrast with 400 normal cases that had the douche. While the first group had a morbidity of 5.65 per cent., the second showed a morbidity of 13 per cent. He also reports 800 cases that were given the vaginal douche during labor. Of these only 84 per cent. never had a temperature of over 37.9° C., while of those let alone during labor, over 90 per cent. passed through their puerperium free from fever.—*Archiv. f. Gynäkol.*, Bd. xlvii, Hft. 3.

Weigh the Baby.—DR. TULEY, of Louisville, Kentucky, says that a valuable means of ascertaining the progress of a child, which is too often neglected, is regular weighing. A child, from birth to six months of age, should be weighed weekly, as by this means, almost to the exclusion of all others, we can tell how the child is developing. During the first week there is generally loss in weight, but by the end of the second week the child should have regained its birth weight, and if there is a gain of less than four ounces weekly, or a stationary weight, we know there is some fault with its nutrition, either in the quantity or quality of the milk which it receives, or its power of assimilation.—*Archives of Pediatrics*, August, 1895.

SURGERY AND ANATOMY.

By T. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,
G. F. SHIELS, M.D., C.M., F.R.C.S.E., Surgeon Post-Graduate Department University of California, San Francisco. and
GEO. B. SOMERS, M. D., San Francisco, Cal.

Restoration of Joint Function after Fracture.—DR. JOHN B. ROBERTS says: Fractures near joints, but not actually involving the joint cavity, seldom lead to anchylosis, though some temporary muscular stiffness may exist for a few weeks after fracture dressings have been discarded. This proportion indicates that retentive apparatus in such fractures should be dispensed with as early as circumstances will permit, so that the stiffness of immobilized joints may be as insignificant and of as short duration as possible. Fracture dressings which maintain perfect coaptation of fragments without restricting the motion of contiguous joints, are, when other circumstances permit their use, preferable to other dressings which prevent the patient from using these joints. When joint cavities are invaded by lines of fracture which do not cause deformity of the articular surfaces, or changes of bony contour near these surfaces, anchylosis is uncommon, unless infection leads to severe synovitis or arthritis. Permanent loss of motion, partial or complete, after fractures involving joints, usually depends on imperfectly reduced fragments, or on synovitis or arthritis caused by septic infection, or unwise passive motion. Early passive motion adds to the traumatism in fractures involving joints, and may thereby increase the formation of intra-articular fibrous adhesions. In aseptic cases it is unnecessary; in cases in which readjustment of the fragments is imperfect it does no good; in septic cases it increases irritation and does harm. It should, therefore, not often be employed. Late passive motion is desirable to hasten the return of functional usefulness in joints stiffened by muscular rigidity after the fracture apparatus has been removed. It is also serviceable to break up intra-articular fibrous adhesions due to synovitis or arthritis resulting from fractures. Massage, working in hot water, frictions with liniments, electricity, passive motion, and attempts at voluntary movement continued for months will often cause great improvement in the functional usefulness of joints supposed to be irretrievably damaged through fracture.—*Philadelphia Polyclinic*, June 8, 1895.

Immediate Amputation after Injury.—In a paper read before a meeting of railroad surgeons, held in New York city, in 1894, DR. ESTES concludes that amputation should be done just as soon as the patient reacts from the trauma, and before septic processes are established from necrosis of the crushed tissues. This period, in his experience, varies from a few minutes to 36 or 48 hours. If the patient has lost but little blood and is in good physical condition, the operation should be done as soon as he can be prepared for it.—*Medical Fortnightly,* June 1, 1895. [Everything depends on the preparation. This should be undertaken carefully and thoroughly, even though hours may be required in rendering the neighboring parts clean, as for instance, where dirt must be soaked off from hands and nails. By the time the patient is thoroughly prepared, shock is rarely sufficient to prevent operation.—G. B. S.]

Operative Measures for the Relief of Tubercular Meningitis.—WALLIS ORD and HERBERT WATERHOUSE have reported in the *Lancet* a case of tubercular meningitis in a child of 5 years, where trephining was followed by success. Ricketts has gone a step further and performed the same operation in what he calls acute cerebral meningitis. This was followed by temporary improvement, but death occurred later. If the practically invariable outcome of tubercular meningitis is death, operative procedures should be instituted with the hope that if successful in a few cases, improved *technique* and better knowledge concerning the time and site of the operation would gradually increase the percentage of recoveries.—*American Medico-Surgical Bulletin.*

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

An Operation for the Advancement of a Rectus Muscle.—DR. FREELAND FERGUS describes his method of advancement as follows: After preliminary cleansing of the eye a perfectly fresh solution of cocain is applied to the conjunctiva and a few minims are injected beneath it, over the muscle to be advanced. The lids being separated with a speculum, with scissors and forceps two horizontal incisions are made in the conjunctiva, corresponding with the upper and lower edges of the muscle, and extending nearly from the cornea to the canthus. A strabismus hook is passed beneath the muscle and is moved backward and forward so as to free it from loose attachments to the underlying sclerotic. Two threads are employed, each provided with a fine curved conjunctival needle. One is passed from the upper incision through the center of the flap containing the muscle and conjunctiva; the other is passed in a similar way from the lower incision, through the same part of the muscle as the first. The author lays great stress on passing the threads through the flap sufficiently near the canthus. One thread is now tied in a firm reef knot, so as to include half the muscle and conjunctiva of the flap, and the other thread is similarly tied so as to include the other half. The muscle is next divided in front of the knot, and as much of the flap as is thought desirable is dissected off between the point at which the muscle is divided and the cornea. A small portion of tendon insertion is generally left. Then one needle is passed through the tendinous insertion, and is carried upward beneath the conjunctiva and brought out nearly above the vertical diameter of the cornea; the other needle is passed in a similar manner and brought nearly below the vertical diameter of the cornea. The ends of the upper thread are then crossed, drawn tight and tied in a firm reef knot, and the lower thread is tied in the same way. In order to relax the muscle which is being advanced, and thus avoid any tearing of the threads through the tissues, the patient should look well toward the external canthus when the internal rectus is being dealt with, and *vice versa.* Fine silk thread is preferred. If thoroughly aseptic with the ends cut short it may remain in place several weeks without causing irritation. Catgut is unsuitable. All dressings are removed after twenty-four hours. In cases of divergent strabismus and heterophoria the author performs advancement. In convergent strabismus advancement seems to be required when the amount of strabismus is fifteen degrees or more. As regards combining advancement with a tenotomy of the antagonistic muscle, the latter operation may often be performed with benefit some few days after the advancement, although it sometimes is required at the same time.—*Ophthalmic Review*, June, 1895.

Defects of the Visual Apparatus in Idiots and Imbeciles.—DR. ALTABAS states that idiots and imbeciles in general suffer from hypermetropia, strabismus, defective color vision, nystagmus, congenital cataract, microphthalmos, and coloboma of the iris, lens, choroid or optic nerve. Among 156 idiots examined by Schleich, hypermetropia, squint and inequality of the pupils were most frequently met with. According to Guibert, fundus lesions exist in 15 per cent. of the cases, nebulæ and other corneal defects in 30 per cent., and strabismus in 60 per cent. The degree of strabismus varies; in most cases the angle of the squint is 40° to 50°; it may be as little as 10°; or there may be merely insufficiency of the recti interni. In idiots binocular vision is the exception. Squint is commonly convergent, being associated with hypermetropia, but is occasionally divergent. Nystagmus may be lateral or rotary. The eyes being small appear deeply sunk in the orbit.—*Medical Press and Circular*, September 4, 1895.

Which Canaliculus to Slit in Probing the Nasal Duct.—DR. J. B. STORY says in the use of the large probes it might seem a matter of no importance whether the upper or the lower canaliculus is selected to suffer the necessary mutilation. The results, however, are far better and more easily attained by selecting the upper instead of the lower. The author had adopted this method many years ago from observing many patients who had been treated by division of the lower canaliculi, whose nasal ducts were perfectly patent, but who, nevertheless, still suffered from constant epiphora, and whose watery eyes were noticeable to the most casual observer. Since he has divided the upper canaliculus he has never failed to relieve the epiphora in cases in which he had succeeded in curing the stricture of the duct.—*Ophthalmic Review*, June, 1895.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M.D., Sacramento, Cal.

Changes in the Blood in Syphilis.—JUSTUS (*Wein. klin. Rund.*), gives his views on this subject, and compares them with those of Semmola. In 1889 Semmola advanced the following propositions: (1) Constitutional progressive syphilis not treated with mercury causes a diminution of hemoglobin and of red corpuscles. (2) If a syphilitic person in whom this diminution is observed is treated with mercury, from the first day of treatment, there is an increase of hemoglobin and of red corpuscles. (3) If, however, the mercurial treatment is continued longer than necessary, so that the mercury loses its specific power, its toxic action will produce a diminution of hemoglobin and red corpuscles. (4) If mercury is given a healthy subject, there appears to be a rapid diminution of hemoglobin and red corpuscles. Justus comes to the following conclusions: (1) In untreated syphilis the hemoglobin is more or less diminished, and this diminution varies with the severity of the disease and its tendency to spontaneous recovery. (2) A sudden diminution of hemoglobin follows inunction or injection of a large dose of mercury. (This is directly contradictory to Semmola's statement. (3) The diminution caused by mercury varies according to the severity of the disease and to the condition of the nutrition; with injections of mercury the fall of hemoglobin can be repeated after several injections. (4) The cure of the syphilitic leisons begins when the fall of hemoglobin ceases, and is followed by a rise. (5) The sudden fall of hemoglobin due to mercurial treatment is a specific peculiarity of the blood of syphilitic persons only, and does not take place in healthy individuals, or in other diseases. (6) This specific reaction of the blood is established at the time when swelling of the gland occurs; it disappears at the time when the existing syphilitic lesions attain the height of their development. Justus concludes that a specific change occurs in the blood of syphilitic persons, and this points to a specific means of treatment applicable only to the blood of syphilitic individuals. This specific condition of the blood, established by the action of mercury, precedes the affection of other organs, and the disappearance of this specific reaction, or the involution of the specific blood change, occurs before retrograde changes appear in other organs. If syphilis is not treated the evolution of the fall of hemoglobin, and also the slow increase of the same afterwards, are seen; if the disease is treated the fall of hemoglobin is greater and more sudden, and the rise is also quicker. The cure by mercury is in all cases not absolute, but only varies according to the duration of time. The application of the above statements to the diagnosis is as follows: In doubtful cases, and in cases of late syphilis with a fresh train of symptoms, a diminution of hemoglobin, after inunction or injection of mercury, is characteristic of syphilis.—*British Medical Journal*, September 21, 1895.

The Nature of Urticaria.—F. O. MARSH, of Cincinnati, argues that urticarial leisons are identical with those produced by the nettle and by small poisonous insects. He considers that the wheals resulting from internal causes are not so much reflex manifestations, but are rather due to an actual local detention within certain spots or areas of morbid products within the general circulation. Regarding the nature of the poison producing the disease, we know that it is often caused by the ingestion of various articles of diet, such as shell-fish, pastry, berries, etc. There are also a certain number of drugs which seem to have the power of causing the characteristic eruption. It seems reasonable to assume a degree of analogy between the occasional products of perverted digestion and secretion occurring within the human alimentary tract, and those animal venoms which have been shown to owe their toxic properties to the presence of venom peptones and globulins. These products are all to be regarded as secretions, rather than excretions, in being the results of constructive phases of animal life; they are distinctly irritative in character, and are to be distinguished in a broad way from those products of retrograde metamorphosis which seem to exercise their baneful influence more by way of simple depression or asphyxia.—*Lancet.-Clinic*, July 20, 1895.

Asepsis in Catheterism.—A recent number of *Prezglad Chirurgiczny*, the Polish surgical review, is largely taken up by DR. S. GROSGLIK'S article on Asepsis in Catheterism. Reviewing the methods usually employed for sterilizing catheters and bougies, he finds most of them to be unsatisfactory. Bacteriological experiments made by himself showed that neither mechanical cleansing nor the use of liquid antiseptics, sulphurous acid gas, or mercurial vapors thoroughly sterilized instruments which had been artificially infected with cultivations of staphylococci and streptococci. This end can only, he affirms, be gained by employing moist heat. Dr. Grosglik describes fully an apparatus, apparently simple and effective, which he has devised for this purpose. In this the instruments are sterilized in five minutes. Elastic instruments, it may be noted, are declared to be unaltered by the process. A useful bibliography is appended to this article.—*Lancet.—Medical and Surgical Reporter*, August, 1895.

Psoriasis Treated with Oil of Copaiba.—DR. J. ABBOTT CANTRELL reports two cases which demonstrate the good results which may be obtained by the use of this remedy. The amount used was 5 minims in capsules three times daily. In addition, good nourishing diet and free access to open-air exercise were prescribed. In both instances the disease was of long standing, and had been shown to be rebellious to several methods of treatment.—*Therapeutic Gazette.*—*American Journal of Medical Science*, September, 1895.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

The Treatment of Fatty Heart.—DR. THEODOR SCHOTT states that the chief object of all dietetic treatment is to induce the disappearance of fat deposit and to prevent its formation. Such courses of treatment as purgatives and "anti-fat" cures which induce the disappearance of fat, and especially that of the heart, bring many dangers with them. There is a difference between the case of a young individual, muscular and of normal blood condition, who undergoes strict dieting, long continued restriction to albuminous diet and decreased amount of food, and one in which fatty heart is complicated by anemia, diabetes, gout, arterio-sclerosis, etc. Especially should too great loss of weight and too rapid emaciation be guarded against. The strict limitation of foods is not justifiable. In all dietetic regulations the object is to bring the ingestion of food into certain narrow limits by the reduction of the whole quantity or of a part of the carbo-hydrates as fats. With the dietetic rules there ought to go hand in hand the mechanical and the hydro-therapeutical treatments. The first should not consist of bodily over-exertion, but rather in methodical carrying out of careful movements in the open air, which may be gradually increased to the severest form of mountain climbing. The course of resistance gymnastics developed by A. and Th. Schott, by which the methodical muscular movements of the patient are performed by another person, or self-restricting gymnastics, where the movements are restrained by the action of antagonistic muscles on the part of the patient himself, may be practised generally. This may be supplemented by bath treatment, which acts upon the sensory nerves, but it is necessary to avoid too long duration of the bath, too great concentration of the bath constituents, extremes of temperature, and always to be under medical control. The question whether a fatty heart, provided no other complications exist or the affection is not too advanced can be treated with complete or partial success, to the exclusion of risk, Schott answers in the affirmative.—*Practitioner*, May, 1895.

Turpentine as a Hemostatic.—SASSE, in an article upon this subject, refers to the but slightly known hemostatic properties of oil of turpentine, though it has met with considerable success in dental practice. He first used it on a patient who for several hours after an extraction had been bleeding profusely, and where the hemorrhage finally was controlled by the application of a woolen tampon soaked in the oil. Thereafter the author was tempted to employ the remedy in the treatment of scurvy. The gums were painted hourly with the undiluted oil, which was also retained in the mouth for a brief period, and administered internally in small doses. The oral hemorrhage, as well as the coëxisting hematuria, gradually ceased, while the patient's health improved. Similarly a hitherto unaffected hemorrhage from the bladder was cured by the hourly administration of an emulsion of oil. Finally Sasse quotes several authors who have successfully employed turpentine in cases of hematuria and hemoptysis.—*Practitioner*, May, 1895.

Salicylate of Soda in Graves' Disease.—CHIBRET speaks of the good results he obtained in the treatment of exophthalmic goitre by salicylate of soda. In each of four cases marked improvement took place in a few days, particularly in one case—a man who was totally incapacitated, but who was much better in six days and able for field labor in a month. In others the symptoms returned on suspending the drug, although it seemed in one instance that after two years it could be much reduced without bad effect. If, however, the patient were over-fatigued or chilled, the salicylate was taken in order to prevent any return of the symptoms. The writer was led to try this treatment by finding a family arthritic history.—*British Medical Journal*, June 8, 1895.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

The Clinical Value of Spinal Puncture.—The originator of this method, says FUERBRINGER, in an exceedingly interesting paper on this subject, was Quincke. The latter concluded, from experimental observations, that it was easy to puncture the subarachnoidal space without opening the osseous part of the vertebral canal. The method of procedure is as follows: The patient lies in the lateral posture, bending forward; a needle is then thrust in the intervertebral cartilage, corresponding to the spinous process of the third or fourth lumbar vertebra, to one side of the median line. Narcosis is unnecessary. As the conus medullaris ends on a level with the second intervertebral cartilage. the needle can not injure the spinal cord; at the utmost it might reach the cauda equina. Spinal punctures, as recommended by Quincke, received but meager recognition until v. Ziemssen reported a number of cases benefited by this procedure. He withdrew from different cases 60, 70, and even 90 ccm. of cerebro-spinal fluid, without evil results. Fuerbringer reports 86 of his own cases, in which spinal puncture was carried out 100 times. The canula of the syringe which is employed, had a calibre of 1 cm. and was 7 cm. long. Narcosis was unnecessary. The puncture was less painful than the aspiration of the fluid. No bleeding from the pial blood vessels was observed in his cases. In 37 cases of meningitis tuberculosa, the diagnosis of which, in a few cases, was dubitable, in 7 cases no tubercle bacilli were detected in the aspirated fluid, whereas they were demonstrable in the other 30 cases. In 3 cases of meningitis serosa simplex observed in children, the results of the puncture were only moderate. In one patient, where meningitis complicated pneumonia, the pneumococci could be demonstrated. Spinal puncture in 4 cases of brain tumor, yielded excellent results. In 1 case of meningitis, the fluid aspirated was pus.—*Berlin. klin. Wochenschrift.* [The impartial opinion relative to spinal puncture, in recent German literature, is essentially as follows: The demonstration of tubercle bacilli in the liquor cerebrospinalis, in cases of tubercular meningitis, yields negative more often than positive results. It is a simple procedure, easily performed by the average practitioner. It is easier to reach the canal in children than in adults. A favorable attitude for the latter is the knee-elbow position. The determination of the percentage of albumin in the fluid withdrawn is not a positive index as to whether the fluid is an exudate or a transudate. When the fluid withdrawn is bloody it may suggest ventricular hemorrhage. The therapeutic results of puncture are thus far not encouraging, although improvements have been repeatedly observed by relief of the pressure symptoms in brain tumors and meningitis.—A. A.]

Palmus.—Under this term, GRAY describes an affection known to the French authors as *Tic convulsif*. The disease was first described by De la Tourette, under the caption, "A Nervous Affection Characterized by Motor Inco-ordination, Accompanied by Echolalia and Coprolalia." The details of this description are as follows: Motor inco-ordination is the first symptom, beginning gradually, without apparently influencing the general health. The face or upper extremities are first affected. When the facial muscles are implicated, there is often incessant winking, grating of the teeth and projection of the tongue, which is frequently lacerated by sudden activity of the masseters. The muscles of the neck taking part in the movements, the head is alternately flexed and extended, and the sterno-mastoids incline it to one or the other side. The lower extremities are soon implicated and unusual movements are made. Thus, the patient stamps his foot, stoops or erects himself, or the movements may consist of a veritable jump. All these movements are very sudden and rapid and each first set of movements is quickly followed by others. During one of these series of movements, the patient suddenly, at the time of a movement, gives vent to an inarticulate cry, like "hem," "ah," which may be repeated several times. At times, this cry has certain characteristics of an echo; hence, the name "Echolalia." The coprolalia was regarded by La Tourette as pathognomonic, and consists of profane oaths or obscure epithets. This author regarded the affection as an hereditary one and eminently chronic. The French authors had their attention directed to this subject by the writings of Beard upon "The Jumpers of Maine," published in 1880, and that of Hammond upon "Miryachit," a similar disease of the far Orient. Beard found that the Jumpers of Maine did whatever they were told to do. Gray divided the disease, as he prefers to call it, into the following types: (1) Facial palmus. (2) General palmus. (3) Acute palmus. (4) General palmus, with pseudo-melancholia. General palmus may be confounded with chorea, but in the latter affection, the movements involve the fibrillæ of muscles; the movements are generalized and not sudden and shock-like, as in palmus. The prognosis varies according to type. The writer has never seen a case of the facial or general variety cured. Nothing can be told regarding the pathology of this strange disease. The treatment consists of the administration of arsenic, galvanism, rest of the patient in bed, correction of errors of refraction, and all irritative lesions of the naso-pharynx should be, if possible, removed.—*American Journal of the Medical Sciences.*

The Mechanical Treatment of Anasarca.—LEICHENSTERN recommends as the best treatment of anasarca a single incision into the skin of each foot. The incision must be deep and long. The details of the method are as follows: The patient is seated in a chair with the feet resting on a stool in a foot bath, the feet of the patient having been previously laved with some antiseptic solution. An incision is now made corresponding to the external malleolus, either on the plantar or dorsal surface of the foot. The incision must include the entire thickness of the skin and be at least 3 centimeters in length. After the hemorrhage resulting from the incision is arrested, the incision on either foot is to be dressed with due antiseptic precautions. The object of having the patient rest with his feet in the foot bath is to create a sort of inclined plane for the edematous fluid which constantly escapes from the incisions. In case the patient can not leave the bed, then any simple contrivance can be improvised, having for its object the inclined plane. In about 8 days cicatrization of the incision is usually complete. In some cases where the incision is very large, sutures may be necessary. This method is claimed to be four times more efficacious than those ordinarily employed. Leichenstern and his assistants claim never to have observed painful excoriations nor eczematous symptoms to follow this method.—*Semaine Médicale*, June 30, 1895.

The Differential Diagnosis of Inflammatory and Non-Inflammatory Effusions.—M. RIVALTA, of Rome, has employed a simple test on which he places great reliance, in determining whether an exudate is of inflammatory or non-inflammatory origin. With this object, he removes, with an ordinary hypodermic syringe, some of the suspected fluid. Two hundred grammes of distilled water is poured into a large glass, to the latter, two drops of anhydrous acetic acid is added, and a drop of the fluid to be examined is dropped into the mixture. It can be noted in case the fluid is of inflammatory origin, that the suspected drop in descending to the bottom of the glass, assumes a white-blueish coloration and a spiral form like the smoke from a cigar. This phenomenon may be repeated each time a drop of the suspected fluid is introduced into the glass. If a little more acetic acid be added to the glass the precipitate formed, at once disappears, thus permitting the conclusion that the precipitate was not mucine, insomuch as the latter is insoluble in an excess of acetic acid. M. Rivalta concluded that the substance present in the inflammatory exudate is a nucleo-albumin produced from the protoplasm of the leucocytes and pus corpuscles. The foregoing method of examination when applied to transudates of non-inflammatory origin constantly yields negative results.—*Semaine Médicale*, May 15, 1895.

The Treatment of Cholelitheasis.—DR. F. BLUM suggests for the treatment of this affection the use of oil enemata. American physicians were the first to employ olive oil *per os*, for the treatment of gall stones. This method was introduced into Germany by Rosenberg. The latter claims that olive oil in large doses is a cholagogue of great potency, and attributes its good results to this action. Later, Fleiner recommended olive oil *per os* and *per rectum* in the treatment of certain affections of the large intestines. Dr. Blum employs the oil enemata after the following method: The patient lies in the recumbent posture with the pelvis raised; the irrigator containing the oil is from 1½ to 3 feet above the patient. After all the oil has entered the intestine, the patient adopts the right lateral posture for 5 minutes. Pure olive oil is used at a temperature of 30° C.; the quantity to be injected is about 500 ccm. In the beginning injections are used daily, after 1 to 2 weeks, every other day, and still later every third day, or less often. Five cases are reported by the author, demonstrating unequivocally the good results obtained from treatment by enemata of olive oil.—*Muenchener med. Wochenschrift*, March 19, 1895.

Rectal Alimentation.—Although physiological and clinical observations have repeatedly demonstrated the fact that resorption occurs from the large intestine; this medium is not employed to the extent it deserves. G. SINGER recommends its employment in ulcer of the stomach, and recognizes rectal alimentation as the only rational method of treatment in this affection. He uses the following formula: Milk, 125 grammes; wine, 125 grammes; yolk of one or two eggs; a little salt: a dessert spoonful of peptone. This mixture is injected two or three times a day at intervals of 4 or 5 hours. The nutrient enema is to be preceded each time by a cleansing enema. It may be necessary in cases of rectal irritability to insert an opium suppository immediately following the enema, or to mix with the nutrient enema 10 drops of opium tincture. When rectal feeding is continued for any length of time, Singer suggests to allay the discomfort arising from hunger, to administer opium *per os*. To combat thirst inject *per rectum* small quantities of a physiological salt solution. In typhoid fever he employs nutrition *per os* and *per rectum*.—*Wiener. med. Presse.*

Bacteriology of Diphtheria.—At the recent Congress of Internal Medicine, TRUMP recognized three kinds of bacilli that may be associated with diphtheria: (1) The true Loeffler bacillus. (2) Non-pathogenic microörganisms. (3) A pseudo-diphtheritic bacilli, which in its cultural behavior could not be distinguished from the bacillus of Loeffler, although animal experimentation demonstrated its innocuousness. Trump found, furthermore, that in children with faucial diphtheria, the Loeffler bacillus is frequently found on other mucous membranes, notably the conjunctiva, nasal, and vulval mucous membranes, without creating any lesions in those situations. The diphtheria bacillus retained its virulence for a long period of time. In a child he was able to cultivate the bacilli from the fauces, 82 days after termination of the disease. In children in whom diphtheria had never developed, he could demonstrate typical diphtheria bacilli from the conjunctival and nasal mucous membranes. Such children were carriers of infection and must be so recognized.—*Berlin. klin. Wochenschrift.*

Meralgia Paresthetica.—By this term, signifying pain of the hips, ROTH describes a symptom complex which he has frequently encountered. The affected region comprises the distribution of the nervus cutaneus femoris ext. In this region there is pain, paresthesia, and anesthesia. The pain is described as burning, and is intensified by standing and walking. Pressure does not intensify the pain. In a few cases hyperalgesia was present, the slightest pressure in the skin being followed by severe and continuous pain. The affection is usually unilateral; in 5 out of 14 cases both hips were implicated. The course of the affection is usually chronic. More men than women are attacked (in 14 cases only 2 women); corpulent individuals pursuing a sedentary life are predisposed. Abusus alcoholicus was noted in half the cases. The author ascribes the pathology of the affection to a para and perineuritis. Therapeutically, he has noted good results following massage and the galvanic current.—*St. Petersburger med. Wochenschrift.*

Acromegaly a Tropho-Neurosis.—M. LANCEREAUX reports the case of a female, who having ceased to menstruate at the age of 37 years, developed the symptoms of exophthalmic goitre, glycosuria, accompanied by polyuria and polydipsia, and the classical symptoms of acromegaly, as described by Marie.

incision must be deep and long. The details of the method are as follows: The patient is seated in a chair with the feet resting on a stool in a foot bath, the feet of the patient having been previously laved with some antiseptic solution. An incision is now made corresponding to the external malleolus, either on the plantar or dorsal surface of the foot. The incision must include the entire thickness of the skin and be at least 3 centimeters in length. After the hemorrhage resulting from the incision is arrested, the incision on either foot is to be dressed with due antiseptic precautions. The object of having the patient rest with his feet in the foot bath is to create a sort of inclined plane for the edematous fluid which constantly escapes from the incisions. In case the patient can not leave the bed, then any simple contrivance can be improvised, having for its object the inclined plane. In about 8 days cicatrization of the incision is usually complete. In some cases where the incision is very large, sutures may be necessary. This method is claimed to be four times more efficacious than those ordinarily employed. Leichenstern and his assistants claim never to have observed painful excoriations nor eczematous symptoms to follow this method.—*Semaine Médicale*, June 30, 1895.

The Differential Diagnosis of Inflammatory and Non-Inflammatory Effusions.—M. RIVALTA, of Rome, has employed a simple test on which he places great reliance, in determining whether an exudate is of inflammatory or non-inflammatory origin. With this object, he removes, with an ordinary hypodermic syringe, some of the suspected fluid. Two hundred grammes of distilled water is poured into a large glass, to the latter, two drops of anhydrous acetic acid is added, and a drop of the fluid to be examined is dropped into the mixture. It can be noted in case the fluid is of inflammatory origin, that the suspected drop in descending to the bottom of the glass, assumes a white-blueish coloration and a spiral form like the smoke from a cigar. This phenomenon may be repeated each time a drop of the suspected fluid is introduced into the glass. If a little more acetic acid be added to the glass the precipitate formed, at once disappears, thus permitting the conclusion that the precipitate was not mucine, insomuch as the latter is insoluble in an excess of acetic acid. M. Rivalta concluded that the substance present in the inflammatory exudate is a nucleo-albumin produced from the protoplasm of the leucocytes and pus corpuscles. The foregoing method of examination when applied to transudates of non-inflammatory origin constantly yields negative results.—*Semaine Médicale*, May 15, 1895.

The Treatment of Cholelitheasis.—DR. F. BLUM suggests for the treatment of this affection the use of oil enemata. American physicians were the first to employ olive oil *per os*, for the treatment of gall stones. This method was introduced into Germany by Rosenberg. The latter claims that olive oil in large doses is a cholagogue of great potency, and attributes its good results to this action. Later, Fleiner recommended olive oil *per os* and *per rectum* in the treatment of certain affections of the large intestines. Dr. Blum employs the oil enemata after the following method: The patient lies in the recumbent posture with the pelvis raised; the irrigator containing the oil is from 1½ to 3 feet above the patient. After all the oil has entered the intestine, the patient adopts the right lateral posture for 5 minutes. Pure olive oil is used at a temperature of 30° C.; the quantity to be injected is about 500 ccm. In the beginning injections are used daily, after 1 to 2 weeks, every other day, and still later every third day, or less often. Five cases are reported by the author, demonstrating unequivocally the good results obtained from treatment by enemata of olive oil.—*Muenchener med. Wochenschrift*, March 19, 1895.

Rectal Alimentation.—Although physiological and clinical observations have repeatedly demonstrated the fact that resorption occurs from the large intestine; this medium is not employed to the extent it deserves. G. SINGER recommends its employment in ulcer of the stomach, and recognizes rectal alimentation as the only rational method of treatment in this affection. He uses the following formula: Milk, 125 grammes; wine, 125 grammes; yolk of one or two eggs; a little salt: a dessert spoonful of peptone. This mixture is injected two or three times a day at intervals of 4 or 5 hours. The nutrient enema is to be preceded each time by a cleansing enema. It may be necessary in cases of rectal irritability to insert an opium suppository immediately following the enema, or to mix with the nutrient enema 10 drops of opium tincture. When rectal feeding is continued for any length of time, Singer suggests to allay the discomfort arising from hunger, to administer opium *per os*. To combat thirst inject *per rectum* small quantities of a physiological salt solution. In typhoid fever he employs nutrition *per os* and *per rectum*.—*Wiener. med. Presse.*

Bacteriology of Diphtheria.—At the recent Congress of Internal Medicine, TRUMP recognized three kinds of bacilli that may be associated with diphtheria: (1) The true Loeffler bacillus. (2) Non-pathogenic microörganisms. (3) A pseudo-diphtheritic bacilli, which in its cultural behavior could not be distinguished from the bacillus of Loeffler, although animal experimentation demonstrated its innocuousness. Trump found, furthermore, that in children with faucial diphtheria, the Loeffler bacillus is frequently found on other mucous membranes, notably the conjunctiva, nasal, and vulval mucous membranes, without creating any lesions in those situations. The diphtheria bacillus retained its virulence for a long period of time. In a child he was able to cultivate the bacilli from the fauces, 82 days after termination of the disease. In children in whom diphtheria had never developed, he could demonstrate typical diphtheria bacilli from the conjunctival and nasal mucous membranes. Such children were carriers of infection and must be so recognized.—*Berlin. klin. Wochenschrift.*

Meralgia Paresthetica.—By this term, signifying pain of the hips, ROTH describes a symptom complex which he has frequently encountered. The affected region comprises the distribution of the nervus cutaneus femoris ext. In this region there is pain, paresthesia, and anesthesia. The pain is described as burning, and is intensified by standing and walking. Pressure does not intensify the pain. In a few cases hyperalgesia was present, the slightest pressure in the skin being followed by severe and continuous pain. The affection is usually unilateral; in 5 out of 14 cases both hips were implicated. The course of the affection is usually chronic. More men than women are attacked (in 14 cases only 2 women); corpulent individuals pursuing a sedentary life are predisposed. Abusus alcoholicus was noted in half the cases. The author ascribes the pathology of the affection to a para and perineuritis. Therapeutically, he has noted good results following massage and the galvanic current.—*St. Petersburger med. Wochenschrift.*

Acromegaly a Tropho-Neurosis.—M. LANCEREAUX reports the case of a female, who having ceased to menstruate at the age of 37 years, developed the symptoms of exophthalmic goitre, glycosuria, accompanied by polyuria and polydipsia, and the classical symptoms of acromegaly, as described by Marie.

Lancereaux insists on the coëxistence of this pathological complex (exophthalmic goitre, glycosuria, acromegaly), and concludes that this complex is caused by the same factor, viz.: a vasotrophic neurosis. The practical value of this belief encourages the hypothesis of the nervous origin of acromegaly, and the treatment of the affection by remedies addressed to the nervous system. The bromides and hydrotherapy respond to this indication.—*Semaine Médicale.*

The First Symptom of Pulmonary Tuberculosis, and its Detection by the Fever Thermometer.—DR. C. W. INGRAHAM regards the fever thermometer as an ideal instrument in the diagnosis of suspected cases of tuberculosis. He feels sustained in the assertion that a rise of temperature of from one-half to one degree at some period of greater or less duration every 24 hours, may be regarded as the first symptom of pulmonary tuberculosis. He believes that this rise of temperature, as a rule, occurs previous to every other symptom, and before the general health of the individual is influenced to a noticeable degree. Cough, with or without expectoration, night-sweats, loss of strength and weight, should be classed as secondary symptoms, as should also the appearance of positive physical signs. The only exception to this rule is when tuberculosis follows in the wake of some acute disease without intervening recovery of health. This elevation of temperature need not of necessity occur every day at the first inception of the tubercular infection, and in many cases may not occur more than two or three times a week when the disease is in an "embryonic" state, and at that stage as well as later stages the temperature will be most elevated following bodily fatigue. Excluding other morbid conditions, organic or functional, that would cause a similar elevation of temperature, it is safe to diagnose the case as one of pulmonary (or laryngeal) tuberculosis when this temperature has persisted for a period of two weeks, and is associated with loss of weight and vitality, even though there has been no accompanying cough or expectoration, and though physical examination gives negative results. At the very beginning of tubercular involvement, with the formation of the first tubercular nodules, a condition indicated by the fever thermometer alone, is the most promising period to successfully treat the disease. At this early stage, incorrectly termed by many as pre-tubercular, the patient raises no infected sputum, which excludes the use of the microscope. At this stage the microscope may even work to the disadvantage and injury of both physician and patient, for the latter may expectorate catarrhal discharge, which even though repeatedly examined will give negative results, on the strength of which the physician assures the patient that his disease is positively non-tubercular, and thus decreases the chances of recovery. Just how long this period of "incubation" may continue without giving microscopical evidence, he does not venture to say, but it undoubtedly extends over a period of weeks and even months, varying in accordance with tissue resistance and extent or intensity of infection.—*Medical Record.*

The Diagnosis of Diabetes and Glycosuria by Examination of the Blood. BREMER (*Centralbl. f. d. med. Wissensch.*) describes a modification of Ehrlich's method of staining cover-glass preparations of blood with eosin and methyl blue. By this method of staining in normal blood, the red blood corpuscles appear brownish red, but the color varies from a clear reddish brown to a deep chestnut brown. The nuclei of the leucocytes stain blue. Bremer found that in diabetes and glycosuria the red blood corpuscles either remained completely unstained, or they were simply tinted light yellow or greenish yellow. Only occasionally a small peripheral zone of the red corpuscle was tinged slightly red. Other minor changes were found in the leucocytes. With acid fuschine and other so-called acid dyes, the red corpuscles of diabetic blood stained just in the same manner as those of normal blood. It was only eosin which did not stain them. In order to determine whether this loss of staining affinity foreos in was due to the abnormal amount of sugar in diabetic blood, Bremer treated cover-glass preparations of normal blood with a solution of sugar. But he found that the red corpuscles still stained with eosin, as in normal blood. If, however, a cover-glass preparation of non-diabetic blood was floated for 25 to 30 minutes in a diabetic urine, the red corpuscles failed to stain brownish red with eosin; they remained unstained, or were only tinted yellow or greenish yellow, as in diabetic blood. But the red corpuscles in a cover-glass preparation of non-diabetic blood, treated with urine free from sugar, stained well with eosin. In glycosuria produced artificially by the administration of phloroglucin for three days, the red corpuscles failed to stain with eosin, as in diabetes.—*American Practitioner and News.*

Meningitis and the Bacilli of Typhoid Fever.—TICTIVE (*Archives de Medecine Experimentale*), has observed two cases of typhoid fever complicated by meningitis, in both of which the bacilli of typhoid fever were found in the meninges at the *post-mortem* examination. The bacilli showed the cultural characteristics of the pathogenic organisms of typhoid fever, and induced in animals when inoculated inflammatory edema of the brain and meninges, together with suppuration.—*Journal de Médecine de Paris.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

The Polyneuritic Psychosis.—DR. R. COLLELLO reports 33 cases of multiple neuritis, 8 of which are described thoroughly. All the cases have, in common, the combination of mental disturbances with the symptoms of multiple neuritis; sometimes the latter symptoms predominate, sometimes the former; only in a few were both equally strongly pronounced. The first neuritic symptoms noticed are an ataxic and high stepping gait, frequently followed by a paresis or paralysis of muscles, more especially of the lower extremities. Lesions of the facial nerve, and of the nerves of the soft palate, larynx and of other cerebral nerves, may occur. The electrical reaction of muscles and nerves is more or less affected, in many cases amounting to an actual reaction of degeneration. The sensory disturbances belong to the late symptoms of the disease, such as pain in the atrophied muscles, tenderness to pressure along the course of the nerves, hyperesthesias, hyperalgesias, etc. The thermic sensibility is, as a rule, unimpaired, though sometimes diminished or perverted. The reflexes are usually diminished, especially the tendon-reflexes. Vaso-motor and trophic disturbances are frequent, as glossy, squamous skin, transversely striped and brittle nails, swelling of joints, bed sores, etc. General symptoms are not infrequently met with, such as dyspeptic symptoms, obstinate vomiting, diminished secretion of urine, lessened sexual desire, menstrual disturbances, tachycardia, etc. The functions of bladder and rectum are nearly always normal. Amnesia is the most characteristic mental symptom. This is general and profound, and may be entirely confined to the most recent events; at the same time, the patient will answer questions with great precision, and reason logically. During convalescence there is a gradual return of the memory. The amnesia develops in conformity with the laws regarding retrogression of memory; the most recent impressions disappear first, the older ones later; the affective abilities disappear more slowly than the intellectual processes, while the acquisitions, which have become almost entirely organic, are preserved. The amnesia is often accompanied by disturbances of consciousness, incoherence and narrowing of the field of thought, or symptoms of exaggerated irritability of the psycho-motor sphere predominate. These are manifested by extreme excitement, frequently developing into attacks of mania. At the beginning of the disease disturbed sleep, interrupted by frightful dreams, visual hallucinations (visions of serpents, mice, cats,) and attacks of fear (fear of brigands, apparitions of blood-like color) occur. The prognosis is influenced by the rapidity of the course of the disease (best in chronic cases) by the general condition of the patient, by the possibility of removing the cause (alcoholism, arsenic or lead poisoning, etc.,) and by the gravity of the complications (pneumonia, decubitus.) The latter are often fatal.—*Annals di Neurologia.*—*Journal of Nervous and Mental Diseases.*

Cocain Poisoning.—DR. J. B. MATTISON, Medical Director of the Brooklyn Home for Habitues, has published an article in which he challenges a statement made by a certain writer, that it has hardly been reasonable to call cocain a poison in any ordinary quantity. After referring to a similar statement made by Dr. Wm. A. Hammond, in 1888, which the latter afterward (in December, 1891), admitted was erroneous, Dr. Mattison reports 4 cases of death caused by the administration of cocain. The first case occured at the Bellevue Hospital. A strong man, suffering from urine retention, was found to have a stricture. One drachm of a 4 per cent, solution of cocain was thrown into the urethra. Almost at once the patient became greatly excited, and in a few seconds went into convulsions, so violent that it required the combined strength of doctor and nurse to hold him on the table. Amyl was promptly used; no reaction; in four minutes the man was dead. The second case was also one of urine retention. A man, 25 years of age, entered Manhattan Hospital, complaining of not having passed urine for two days. The catheter revealed a traumatic stricture, due to a 2½-inch sewing needle put into the urethra by a chum during a drunken frolic. Twenty minims of a 4 per cent. cocain solution were injected into the urethra. Immediately the patient went into convulsions, and, despite every effort, died. The autopsy in each case showed intense lung congestion. The third case was that of a young woman who visited a "complexion artist," in Chicago, to have a facial blemish removed. Sham electricity was used, it being really a dummy battery, one sponge of which, saturated with a strong solution of carbolic acid, was held to the affected part, with the result of causing great pain. To relieve this, a 4 per cent. solution of cocain was applied freely. In a few minutes the woman became excited, said she felt strange, walked to a window, and fell dead. No autopsy was held. In the fourth case the cocain was applied in an operation for rectal fistula on a man, 26 years of age. Twenty minims of a 4 per cent. solution were injected hypodermically to produce anesthesia. No effect ensuing in ten minutes, 20 minims more were injected. In three minutes the man became unconscious and convulsed. One minute later he was dead. There was no autopsy.—*Dublin Journal of Medical Science.*

Iodine Injections in Hydrocephalus Chronicus.—PROF. RANKE, of Munich, reported, at the last meeting of German physicians and surgeons, a case of chronic hydrocephalus in a child of 10 months old. The head had rapidly increased for six months till it was 58 cm. in circumference. The reflexes were increased, muscular sensibility augmented, strabismus convergens, etc., present. Paracentesis had been performed several times. He resolved on iodine injections, using 2 mm. trocar in the left parietal suture 5 cm. deep, and drawing off 250 cubic centimeters of serum, and afterward injecting 10 grammes of iodine in 20 grammes of water at a temperature of 37° C. Immediately after the operation vomiting ensued, the temperature fell to 36° and collapse was threatening. Three-quarters of an hour later the temperature rose to 40°, with repeated vomiting and exalted reflex. The fever continued like this for about 24 hours, and did not entirely subside for about two weeks. Iodine was eliminated by the urine. During this period there was a loss of body weight and the circumference of the head was reduced 2 cm. At the pressing solicitations of the parents the child was allowed to leave the hospital, but on the second day afterward acquired an infectious intestinal catarrh, the temperature rising to 40° C., and ten days afterward it died. At the *post-mortem* examination 1,000 cubic centimeters of fluid was removed from the right lateral ventricle; this fluid was clear. The fluid found in the left lateral ventricle, the one operated on, was brownish colored. The wall of the left ventricle was thickened and inflamed; the two ventricles did not communicate with each other. Prof. Ranke considered the cessation of the secretion of iodine by the kidneys before the child left the hospital a proof that the death had nothing to do with the operation. The thickening of the wall of the left ventricle was testimony of the successful effort.—*Medical Press and Circular.*

Paretic Dementia and Syphilis.—DR. EMIL HONGBERG reports in detail the history of 100 cases of general paralysis, observed at the Insane Asylum at Lappvik, near Helsingfors, Finland. Of 1,451 cases treated at the institution in the course of 17 years, 100 were paretics (91 men and 9 women); 74 per cent. of these patients gave a certain history of syphilis; in 12 per cent. other forms of venereal disease were present. In only 14 per cent. did the history fail to give information on this point; even in these cases one could not with certainty exclude specific infection. In the majority of the cases syphilis had been acquired between the eighteenth and thirty-second year, and the general paralysis appears to have developed from 5 to 15 years after the luetic infection. Among the 1,351 insane, who were not suffering from general paralysis, only 4.28 per cent. showed a previous history of syphilis. While many of the male general paretics belonged to the better classes, none of the women belonged to these classes of society. In nearly all the cases the previous luetic symptoms had been of a mild form. Besides lues the author found some other etiological factors, as follows: In 21 cases heredity; in 13 cases psychical disturbance; in 10 excessive indulgence in liquor, and in 3 trauma; 82.9 per cent. of the general paralytics died inside of four years, while in 43.6 per cent. the duration of the disease did not exceed two years. The course of the disease was, as a rule, progressive; only in three cases did the writer meet with temporary remissions of the disease. Antiluetic treatment did not seem to have any effect upon the course of the disease. *Post-mortem* examinations did not reveal any recognizable specific syphilitic changes. The author concludes that syphilis is a factor of great etiological importance in general paralysis.—*Fortschritte der Medicin.—Allg. Zeitschr. f. Psychiatrie.*

The Treatment of Delirium Tremens.—DR. R. BELLAMY recommends to administer to the patient immediately after admission a calomel purge and 20 grains of trional mixed with water, with 10 minims of tincture of capsicum. If the condition warrants, a very hot bath is given, the temperature of which is gradually lessened. If after thirty minutes the delirium shows no signs of abatement 10 grains of trional are given. He recommends forced feeding in small quantities, often repeated, in all cases, the food administered consisting of milk, eggs and soups. He concludes from his experience with trional that delirium may be controlled by it with greater rapidity and safety than by other hypnotics. In the majority of cases a marked stimulant effect was observed, possibly on account of the methylic and ethylic elements which enter into the drug. On account of the low temperature noted in all cases, trional must possess antipyretic properties, thereby simulating other drugs of the phenol group. It appears to be well tolerated by the stomach, and in one case was rapidly absorbed when administered *per rectum*. Dr. Bellamy did not observe any unpleasant after effects; with the exception of two, there was in all cases a speedy recovery.—*American Journal of Medical Sciences.*

Biting the Nails.—DR. BÉRILLON expresses the opinion that onychophagia and similar habits are generally associated with degeneracy. The frequency of nail-biting varies greatly in different institutions, in some, two or three out of every ten children are addicted to the habit. A careful examination invariably reveals signs of degeneracy. Such children are generally less healthy in appearance than others, presenting deformities of the skull, and anomalies of the teeth and ears; and they often exhibit a marked antipathy to physical exercise and games requiring effort. They write poorly, and show marked inferiority in manual dexterity. They are slow to learn, and are incapable of continuous application; in short, they always exhibit an inferiority in some direction or other. The usual corrective measures prove unavailing; in the majority of cases only hypnotic suggestion seems to be capable of effecting a cure.—*Medical Week.—American Journal of Medical Science.*

A Case of Epileptic Salivation.—DR. CHARLES FÉRÉ reports a case of epilepsy with classical attacks, which disappeared after the prolonged employment of large doses of the bromides. Afterward the following symptoms, equivalents, developed: pallor, ocular convergence, extension of the head, absent-mindedness, open mouth, from which flowed large quantities of saliva, as much as 124 grammes. From time to time there was sudden salivation without loss of consciousness or vertigo. Féré believes this case to support Bechterew's view that the cortex exerts an influence over the salivary secretion.—*Journal of Nervous and Mental Disease.*

FORMULÆ.

Napoleon's Favorite Prescriptions. The following are given by CHARLES B. WILLIAMS as prescriptions frequently used by Napoleon I:

(1) Pulv. ipecac. .... gr. xxx
Pulv. scillæ
Pulv. ammoniæ ...... āā gr. xl
Div. in pil. No. xxxiv

S.—Two pills night and morning. The above was used for difficulty of breathing, bronchitis, etc.

(2) Liq. ammoniæ fortioris . mx
Syrupi erysemi .... ℥ iss
Infusionis tiliæ florum ... ℥ iiss

S.—To be taken at one dose.

This was used for immediate relief of hoarseness.

The syrup of erysemum and the infusion of linden flowers would be difficult to obtain at the present day, and these may be replaced as in the following:

Liq. ammoniæ fortioris .. mx
Syrup acaciæ .... ℥ iss
Aq. aurantii flor. .... ℥ iiss

S.—To be taken at a dose.—*Medical and Surgical Reporter.*

Sedative Cough Mixture in Phthisis:

Codeinæ sulph.	gr. iii
Liq. atrop. sulph.	m xii
Liq. strychniæ	ʒi
Syr. tolutani	℥iss
Infus. rosæ acidi *ad.*	℥vi

S.—Tablespoonful in a wine-glass of water every four or six hours.—*Medical Press and Circular.*

Tonsillitis.—(MILES):

Ol. eucalyptus glob.	mxv
Spr. camphor	ʒiss
Tinct. guiac.	ʒiiiss
Glycerin q. s. *ad.*	℥i

S.—Ten drops on sugar, to dissolve in the mouth every hour or two.—*Medical Record.*

Multiple Warts of Face.—KAPOSI uses:

Sulphuris sublim.	ʒv
Glycerini	℥iss
Ac. acet.	ʒiiss

S.—Apply locally to each wart. The warts dry up and then drop off. The treatment may be continued for several days.—*Med. Press and Circular.*

Glycerole of Borax in Ozena.—MUSEHOLD prescribes:

Pure glycerine	70 grammes
Borax	20 grammes
Distilled water	30 grammes

S.—Use as a nasal spray 2 or 3 times a day.—*Nouveaux Remèdes.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., San Francisco, Cal.

Mortality for August, 1895.—The deaths registered in 64 town districts of the State, during the month of August, in a population of 757,097, correspond to an annual rate of 13.56 a thousand, the total mortality having been 858. 78 deaths were due to zymotic diseases, giving an annual rate of 1.10 a thousand. Of these, 5 were due to diphtheria, 23 to cholera infantum, 21 to typhoid fever, 10 to diarrhea and dysentery, 8 to cerebro-spinal fever, 2 to whooping cough, 2 to croup, 7 to intermittent and remittent fevers, 0 to scarlet fever, 0 to measles, and 0 to small-pox. 191 deaths resulted from diseases of the respiratory organs, giving an annual rate of 2.64 a thousand. Of these, 138 were due to consumption, 30 to pneumonia, 16 to bronchitis, and 7 to pulmonary congestion; the rate being, for consumption and pneumonia, 2.16 and .46, respectively. 70 deaths resulted from diseases of the heart, 2 from alcoholism, 2 from erysipelas, 31 from cancer, and 414 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 593,000, was 13.80. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from Sacramento, the lowest from Alameda.

METEOROLOGY.

Summary for August.—*Temperature.*—The normal temperature of the State for July is 73.7°; the average for August, 1895, was 73°, a departure from normal of - 0.7°. The highest monthly mean was 104° at Ogilby, in the desert regions; the lowest, 54°, at Eureka and Point Reyes. The maximum temperature was 124°, at Volcano Springs, on the 5th. The minimum, 21°, at Bodie, on the 30th. The greatest monthly range was 67°, at Bodie and Turlock; the least, 16°, at Hotel Del Coronado. The absolute monthly range for the State was 102°.

Rainfall.—The normal precipitation for the State for August is 0.03 inches; the average for August, 1895, was 0.03 inches. The greatest monthly precipitation was 0.94 inches, at Edgewood. The least, nothing, at numerous places throughout the State.

Unusual Features.—The unusual meteorological feature of the month was the continuation of the mild and even temperature.—JAMES A. BARWICK, Director California Weather Service.

California—Tabular Statement for August, 1895.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	77.3	105	55.0	----	----	----	----	0.13	----	----	----	----	N.W.	Southern Pacific Company.
Berkeley .... "	58.6	85	51.0	72.0	56.0	16.0	0	0.00	85.0	21	8	2	S.W.	Obs. University of California.
Colfax........... "	73.8	103	52.0	----	----	----	----	0.28	----	----	----	----	N.E.	Southern Pacific Company.
Coronado........ "	68.0	76	60.0	71.0	64.0	7.0	0	0.00	79.0	22	8	1	W.	Hotel del Coronado.
Eureka........... "	54.0	66	45.0	59.0	49.0	10.0	2	0.11	92.0	11	10	10	N.W.	Weather Bureau Dept. Agr.
Fresno........... "	80.5	110	51.0	98.0	64.0	34.0	1	T	33.0	28	2	1	N.W.	" " "
Independence.. "	76.0	105	46.0	92.0	60.0	32.0	1	0.04	29.0	22	5	4	S.E.	" " "
Los Angeles.... "	69.0	88	51.0	80.0	57.0	23.0	1	T	81.0	6	25	0	W.	" " "
Monterey .... "	60.1	78	50.0	----	----	----	0	0.00	----	----	----	----	S.W.	Southern Pacific Company.
Napa............ "	66.1	90	50.0	79.0	56.0	23.0	0	0.00	69.0	14	15	2	S.W.	Station Napa Insane Asylum.
Oakland......... "	58.7	84	50.0	70.0	54.0	16.0	0	0.00	85.0	19	11	1	W.	Chabot Observatory.
Paso Robles.... "	76.1	106	48.0	----	----	----	0	0.00	----	----	----	----	W.	Southern Pacific Company.
Red Bluff....... "	81.0	107	55.0	96.0	57.0	39.0	1	T	20.0	26	3	2	S.E.	Weather Bureau Dept. Agr.
Sacramento. ... "	73.0	99	51.0	88.0	57.0	31.0	1	T	60.0	23	4	4	S.W.	" " "
San Bernardino "	74.0	100	44.0	93.0	55.0	38.0	0	0.00	----	23	4	4	W.	A. K. Johnson, M. D
San Diego....... "	67.0	78	54.0	72.0	62.0	10.0	0	0.00	79.0	22	8	1	W.	Weather Bureau Dept. Agr.
San Francisco.. "	58.0	80	50.0	64.0	53.0	11.0	0	0.00	87.0	14	16	1	S.W.	" " "
Santa Barbara.. "	65.0	78	51.0	72.0	58.0	14.0	0	0.00	79.0	20	9	2	W.	Hugh D. Vail.
Santa Cruz...... "	63.0	93	47.0	73.0	53.0	20.0	0	0.00	----	19	3	9	W.	W. R. Springer.
Yuma...........A. T.	91.0	114	64.0	104.0	78.0	26.0	1	T	46.0	27	3	1	S.W.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times.

Communications are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

Sacramento: October, 1895.

THE DISPOSAL OF GARBAGE IN OAKLAND.

The proper and effective disposal of garbage and offal in cities and towns, is one of the vexed problems of modern municipal administration. There is but one way that this can be done with perfect satisfaction, namely, incineration; and for this purpose several efficient appliances are at the disposal of any city. Municipal authorities are, in this particular, disposed to be derelict, and unless the amount of garbage has reached very large proportions, and the faulty methods of disposal have created intolerable nuisances, they are disposed to continue with slipshod measures.

In Oakland, this question has been brought to an issue, and in its report to the City Council, the Board of Health has very plainly indicated the necessities of that city and the means at its disposal for dealing with this necessary evil. The report having stated that ''there can be no question as to the success of disposing of garbage by incineration,'' pertinently inquires ''why should this city, through its Council, delay any longer in adopting an available health measure that has given entire and universal satisfaction to such cities as New York, Richmond (Va.), Savannah, Salt Lake, Ogden, Lowell (Mass.), and many more?'' The Engle Destructor is the apparatus recommended by the Board of Health, and our observation of it at Salt Lake, Denver, Milwaukee, and at the Chicago World's Fair, convinces us that it is not only perfectly effective in its work, but also exceedingly economical in maintenance. Once started, the apparatus can be kept in continuous use for a long period, and by judicious firing, the garbage consumed can be made to furnish a large amount of the fuel. A considerable saving in fuel can also be effected by keeping the ashes separate from the garbage, and Cincinnati is mentioned as one of the cities where this has been found quite practicable.

The report, which covers the ground very thoroughly, was presented to the City Council in due course, and, as is commonly the case, was neglected; the reason given being want of funds. The Board of Health, deeming it best to obtain a decision on the question, precipitated an issue by refusing to permit the dumping of garbage anywhere within the city limits. In consequence of the enforcement of this order, the necessity for prompt action became apparent, and the council requested answers to a series of questions regarding the establishment of a crematory. The answers to these questions embodied the information contained in the former report, in a concrete form. The following figures, estimated as sufficient for the needs of Oakland, with a census population of 60,000, may be useful in estimating the cost of plants for other localities. The Engle is recommended as the best furnace, the estimated cost being $15,000. A lot 50x150 feet will be sufficient for the erection of the apparatus. Estimating the number of house-holders in the city to be 15,000, and that they pay on an average twenty-five cents per month, the the report figures that the annual cost, under the present system for the collection of garbage amounts to $45,000 per annum. It is stated that the city, with twenty carts, can collect all the garbage at an expense of $60 per day, or $18,000 per annum, an annnal saving to the tax-payers of $27,000. The cost per month of operating the crematory, is given as follows: Salary of two men, $120; 30 tons of coal at $6 per ton, $180; repairs and incidentals, $200; total, $500.

It is exceedingly difficult to convince the average official that, while the primary cost of efficient sewerage systems, first class street work, and a good water supply, may be expensive, the subsequent saving to the community, in dollars and cents, far outweighs this expenditure. In sanitary matters, apart from these considerations, the saving in absence of sickness and in the prolongation and preservation of human life, through diminished mortality, must also be taken into account. It takes but little reflection and figuring to show that the balance is overwhelmingly in favor of scientific sanitation; and we trust that Oakland will soon be enjoying these advantages and furnishing an object lesson for other cities in California that are equally in need of garbage crematories.

NOTES.

Supposed Cases of Poisoning from Impure Cheese.

Several cases of what may or may not have been poisoning from impure cheese, recently occurred in Oakland. The cases, which were under the care of Dr. A. H. Pratt, of that city, did not present very urgent symptoms. The family, a poverty-stricken one, had been on short rations for several days. On this particular day, they had some bread and cheese, after eating which, all were attacked with vomiting, more or less severe. The mother, in addition to the vomiting, suffered from purging, with griping pains. One of the children also suffered with abdominal pains. In the absence of an examination of the cheese for possible toxines, it is difficult to say whether the cases were really ptomaine poisoning, or simply acute indigestion, in badly nourished subjects. The former, however, seems rather more probable.

A Proposed Revival of the Index Medicus Abroad.

We are in receipt of a circular dated Paris, July 15th, and signed by M. Marcel Baudouin, of the Institute Internationale De Bibliographie Scientifique, stating that it is proposed to continue the publication of the "Index Medicus," "according to a very new basis" [sic.] M. Baudouin says that the bibliographical sources at his disposal are not sufficiently large; he therefore asks that one copy of every scientific periodical published be sent him, also one copy of every scientific book issued by the various publishing firms. There will be a special review appearing quarterly and bearing the title "La Bibliographie Scientifique" in which every book sent will be advertised. If two copies of a book are forwarded, an outline of its scope will be given in twenty lines. With all possible respect to the author of this circular, it would certainly have seemed better had he procured some one to write it in English. This seems the more necessary when the magnitude of the work he has undertaken is considered.

California Northern District Medical Society.

The fifth annual meeting of the California Northern District Medical Society will be held in Pythian Hall, Ninth and I streets, Sacramento, on Tuesday, October 8, 1895. There will be two sessions, a morning session commencing at 9 A. M., and an afternoon session at 2 P. M. The evening will be devoted to a banquet at the Maison Faure, given to the visitors by the Sacramento Society for Medical Improvement. The following are the titles of papers, with the names of their authors, and the names of those who will open the discussions: Annual Address by the President, H. D. Lawhead, of Woodland, "Interstitial Electro-chemical Decomposition and Medication." "A Case of Induced Insanity," A. W. Hoisholt, Stockton; David Powell, Marysville. "Contracted Sphincter," E. B. Robertson, Jackson; E. K. Caldwell, Marysville. "Malaria," T. P. Peery, Yuba City; O. Stansbury, Chico. "Treatment of Pneumonia," C. E. Stone, Marysville; W. E. Bates, Davisville. "Suppurative Pyelitis," G. A. White, Sacramento; R. F. Rooney, Auburn. "Quacks and Humbugs," C. H. Gibbons, Arbuckle; G. L. Simmons, Sacramento. "Diseases of the Rectum in Women, with Special Reference to the Treatment of Hemorrhoids," W. A. Briggs, Sacramento; W. R. Cleaveland, Biggs. "Some Points in the Pathology, Diagnosis and Operative Treatment of Appendicitis," T. W. Huntington, Sacramento; Thos. Ross, Sacramento.

Anomalous Febrile Attacks in Oakland.

Anomalous cases are always puzzling to the medical attendant, and if severe, are often a source of grave anxiety. In the absence of a positive diagnosis, prognosis and the prevention of complications becomes much more difficult. For this reason, reports of anomalous cases are always valuable. Dr. D. D. Crowley, of Oakland, has recently observed a number of cases of a febrile type which were, apparently, infectious. In West Oakland, four children, whose ages ranged from 2 to 12 years, were attacked with pains in all parts of the body, accompanied by severe headache. There was abdominal pain, with tympanites, and, in 2 of the cases, diarrhea. All of the children suffered from nausea and coated tongues with red edges and tips. The temperatures, from the beginning, ranged from 101.5° to 103.5° F. The children were not all attacked at the same time, but one following the other, a day or two intervening in each case. The cases soon yielded to quinine, small doses of phenacetin being given to reduce the temperature. One week after the recovery of these patients, a young man in the same family passed through a similar attack. Owing to the occurrence of these cases and the coëxistence of a number of similar ones in the city, Dr. Crowley was at first inclined to regard them as enteric fever. Their prompt recovery under treatment, however, negatived this view, and in subsequently reporting the cases to the Health Department, the Doctor stated his belief that they depended upon unripe fruit and errors in diet, which were conspicuous in all the cases.

Unfortunate Indiscretion on the Part of a Prison Surgeon.

Dr. J. Leroy Mansfield, an eclectic, who has charge of the Hospital of the State Prison at San Quentin, has been asked by the Warden to tender his resignation under circumstances which indicate, at least, very grave indiscretion in the performance of his official duties. It appears that a convict, named Theodore Donguli, now serving an eleven years' sentence for manslaughter, has been endeavoring to obtain a pardon. The sentence will expire in May, 1897, but the prisoner is suffering from advanced phthisis, and has probably but a short time to live. In order to take any action in the matter of a pardon, it would be necessary to obtain a certificate from the prison surgeon as to the convict's health. Undoubtedly the statement from that official could be so worded as to materially increase the chances of obtaining executive clemency. It appears that, at an interview in relation to this matter, the convict's friends paid Dr. Mansfield $50, for what purpose was not stated at the time. The physician subsequently acknowledged the receipt of the money, but said that it was to be used in the purchase of such delicacies or luxuries as were not obtainable from the State, and that it was in no wise intended to influence his action in the matter of a certificate. The money was placed in the vaults of the Pacific Coast Savings Society, in San Francisco, presumably in the physician's box. Under the law, any funds of this nature must be placed in the hands of the Warden, and to the credit of the prisoner. The transaction has attracted the attention of the press, and the outcome of the matter has been that Dr. Mansfield's resignation has been tendered, and accepted by the Warden.

Proposed Reduction in the Fees of Medical Examiners by the Equitable Life.

Under date of August 27, 1895, the Equitable Life Assurance Society has issued a circular to its medical examiners, announcing a reduction in fees for medical examinations. At present the Society, in common with all insurance companies of the first class, pays a uniform rate of $5 for medical examinations. Where the application is for more than $25,000 insurance separate examinations are made by two physicians; microscopical examination of the urine, if necessary, is also paid for as an independent fee. Under the proposed schedule a graded rate for examinations is made, as follows: Applications for $3,000 insurance or under, $3; over $3,000 or less than $25,000, $5; $25,000 and upward, $7.50; installment insurance to be reckoned at its commuted value. Should this schedule go into effect it is apparent that the loss will fall upon the medical examiners of the smaller cities and towns. In large centers of population the companies, as a rule, employ examiners at a salary, and here, also, applications for insurance for large amounts are more common than in the country districts. We have not at hand any figures upon which to base conclusions, but an experience of many years in these matters indicates that a very large proportion of applications for insurance are for $3,000 or under. The proportion is not probably far short of 50 per cent., which would, of course, mean a reduction of about 40 per cent. in the fees of medical examiners. We hope to present facts and figures in support of these statements at an early date, when the subject will be treated in a more extended manner. Meanwhile, we would strongly advise all medical examiners for the better class of insurance companies to decline the proposed reduction, and to insist upon the payment of the established fee. As far as the medical examiner's relation to the company is concerned, there is no warrant whatever for this reduction. The company requires, in fact demands, that its examinations shall be rigidly conducted in every case, whether the amount be $500 or $5,000. In connection with the reduced rates, no mention whatever has been made of reduced responsibilities, or of a diminution in the work of the medical examiner, where smaller policies are concerned. As this is the only aspect of the case affecting his relation with the company, it is manifestly unfair to reduce his fee because of circumstances which relate only to the actuarial department. Viewing the proposition as a whoie, it would certainly seem that it did not emanate from the Medical Directors of the company, but rather from some of its accountants. It certainly sets a premium on second-rate medical examiners and on inferior examinations, which, in these days of keen competition in the insurance business, seems very bad business policy.

A Doctor who Practises Both Schools.

In our issue of September we had occasion, on the part of Dr. W. H. Mays, to deny a statement published in the Stockton *Mail*, that he had been in consultation with a Dr. C. S. Sargent, of that city, who holds a license from the Homeopathic Board of Medical Examiners. Dr. Mays' denial was unequivocal and in plain and unmistakable terms. According to a subsequent publication in the Stockton *Independent*, Dr. Sargent appears, however, to ignore this denial and suggests that there may have been a mistake in identity between Dr. W. H. Mays and his nephew, Dr. A. H. Mays, which, of course, was not the case. Dr. Sargent's statement as to his position in the profession, as well as his method of practice, is quite interesting, and we give it as it appears in the *Independent:*

"It is true that I am practising under a license from the Homeopathic Board of Medical Examiners, and it is also true that I was at one time in partnership with a homeopathic physician here. It is also true that I graduated first in the Hahneman College of Philadelphia, which is a homeopathic school. That was in 1881. In 1885 I went to New York and took a course with the New York Poly-clinic, which is of the new school. On returning to Stockton I did not take out a new license, because I did not want to lose whatever prestige the four years between 1881 and 1885 might give me. I am one of those who believe that when two schools of medicine have stood as long as the two schools mentioned, there is something good in each of them, and I have tried to get that good. If there were two others in which I believed there was some good, I would go through them if I could spare the time and the money. I do not confine my practice to one school and if it do the members of the old school and the paper referred to any good to know it, I will state that the treatment of the Governor's case was not according to the tenets of medicine which I first learned. Not but there was good in what I then learned, but because I thought that other treatment was then required.''

If Dr. Sargent means to imply by ''taking out a new license'' that he could have obtained one from the Board of Examiners, he is certainly in error. ''A course in the New York Polyclinic'' is certainly not graduation in medicine, nor sufficient grounds upon which to obtain a license to practice. Incidentally, it may be mentioned, that upon the strength of his certificate from the New York Polyclinic, he applied to the San Joaquin County Medical Society for admission. The application was denied, as it was, of course, impossible to entertain one on that basis. As for his liberality in the matter of practice, it was doubtless fortunate for his distinguished patient that he did something for him instead of trusting to nature and homeopathy. It illustrates, however, in a remarkably candid manner, the fact upon which we have so often insisted, that there are very few homeopaths, *i. e.*, persons whose practice is confined exclusively to homeopathy, and that homeopathy, pure and simple, is a fictitious professional designation for a purely commercial purpose.

Substitution in Pharmacy.

The question of substitution in the filling of physician's prescriptions has long been a vexed one, and as the multiplicity of preparations and the number of proprietary, as well as patented remedies, both domestic and imported, has grown so amazingly the evil has increased *pari passu*. No doubt the druggist has cause for complaint, but his business is to fill the prescription of the physician, and if he attempt to do so, the work must be done honestly and thoroughly. That the evil of substitution is well nigh universal, any physician can testify. According to the *Western Druggist*, a practical test of the professional integrity and competence of the druggists in a certain section of Ohio was recently made by Mr. E. A. Schubert, a pharmacist of Fostoria. Mr. Schubert says:

''I thought it would be a capital idea to write a prescription of easy composition and analysis, to see how many druggists would fill it correctly. I set to work immediately, mailing to each of fifty physicians one of the prescriptions, at the same time asking him to write it as a prescription of his own, send some friend with it to his druggist to have it filled, a copy taken and returned to me with the compounded prescription. Out of the fifty requests sent out, I received thirty-seven answers. The prescription called for a three-ounce preparation, but, placing them side by side, I found twenty-one to be three-ounce preparations, seven were in size four ounces, while the rest ranged in size from five to eight ounces. It was to be an emulsion. Nineteen were of that composition, the remainder were far from being true to name. In color, when correctly filled, it would be nearly white; of these, twenty-two were true in color, while the remainder ranged from a steel gray to nearly all the known hues. The principal active ingredient was the acetate of morphine; thirteen only contained this, the remainder principally contained the sulphate. *Out of the entire number returned, eleven were found to be filled correctly.* The remainder were base substitutions, either through ignorance or intention. Of the eleven that were correct, nine came from the hands of Ph. G's, the remaining two were compounded by old and reliable druggists in the city. Of the twenty-six not properly filled, we found five Ph. G's.; the remainder were country druggists having very little experience in this line and located, with but few exceptions, in towns of 6,000 inhabitants, and less."

This certainly looks bad for Ohio, especially, as the locality is described as one fully equal in the professional intelligence and honesty of its druggists to that of any section in the State or of other States. We have no doubt that were similar tests made in California, errors in compounding, as well as substitution, would also be demonstrated. There are apparently three remedies for this condition of affairs. (1) The universal abandonment of all patented and proprietary preparations by physicians. (2) The more general dispensing of medicines by physicians or through purely prescription pharmacies. (3) The better education, both preliminary and professional, of the future pharmacist. It is quite evident that the first remedy will never be put in force. The objectionable preparations are in universal use, and they are here to stay. The remedy lies, therefore, between the remaining courses, and as long as the druggist openly encourages counter prescribing and retails the innumerable useless or deleterious patent medicines so persistently pushed through newspaper advertising, he cannot justly complain of the physician who inflicts him with legitimate proprietary preparations in his prescriptions, or who furnishes his medicine wherever possible.

"Dr." Ambrosenvf Convicted under the Medical Practice Act,

A person described as a "Russian Count" and calling himself "Dr." Ambrosenvf, has, for some time past, been practising as a physician in Oakland. A death certificate signed by the alleged physician was returned to the Health Office, and was held pending investigation. The "Dr." stated that he had been granted a certificate by the Board of Examiners, but that it had not yet been delivered. The Secretary of the Board seems to have been lenient in the matter, and as there appeared to be no grounds for investigation regarding the death of the person, nothing further was done at that time. In about two weeks a second certificate came in, and inquiries were at once set on foot, from which it appeared that the "Count" had never been issued a certificate, and that there was no prospect of his receiving one without further qualification. He was arrested at the instance of the health authorities, prosecuted, convicted, and fined $100. Being unable to produce the necessary amount, he went to jail, but was bailed out. Subsequently, one of his bondsmen withdrew and he was recommitted. He was, however, again bailed out, and the case has now been appealed to the Superior Court, which we trust will sustain the judgment of the lower Court. It is, unfortunately, but seldom that the proper authorities take any action toward obtaining convictions under the Medical Practice Act. The statute is far from perfect, and has many loop-holes for escape, which makes the work of prosecution and conviction necessarily difficult. There are many cases, however, in which conviction would follow prompt prosecution, but if the legally constituted authorities fail to take action, it then devolves upon any citizen, or upon the local physicians, to file a complaint. There are three officials who, from time to time, must have official knowledge of many of these cases. They are the Coroner, the City or District Attorney, and the Health Officer. Prosecutions may be initiated by them, and such proceedings are far more likely to lend support to the law than processes undertaken by a physician or a number of physicians, as, in the latter case, the cry of persecution or of "professional jealousy" is always raised. Where prosecutions are undertaken by physicians, action should be commenced immediately upon the location of the quack. Our experience has been that a few weeks' residence in his new field will be sufficient to insure immunity from the average jury. On the other hand; his arrest as as a charlatan, on the eve of commencing operations in a new field, would, by his prompt exposure, place the community on its guard, and many would hesitate to risk their money and their health with a stranger who had already been branded as an imposter. If this plan were adopted, and if local Medical Societies maintained committees for this purpose, we are confident that even our defective law would greatly diminish the number of imposters who find a lucrative field in California. It would further result in the publication of the status of the individual, and in the transmission of this knowledge to other communities. Where prosecutions by the local authorities were ineffective, the matter could then be pushed by the Board of Examiners, if there were any prospect of success. It is quite probable that the demonstration of the efficiency of the law might go a long way toward procuring a better one, by educating the people as to its necessity, and by unifying the profession in its hearty support.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, August 27, 1895.

The President, C. B. NICHOLS, M.D., in the Chair.

Griffin Fingers.—DR. T. W. HUNTINGTON reported a case [patient exhibited] upon whom he had operated for obstinate contraction of the fingers. He said: This patient is a boy of 13 years, who, over two years ago, sustained a fracture of both bones of the forearm. There was also an injury to the median and ulnar nerve trunks, attended by paralysis of the exterior muscles of the forearm. When I first saw the boy, the fingers of the affected arm were drawn firmly down upon the palm, and the hand was partly flexed upon the wrist. The sensory nerves supplying the dorsum of the hand and forearm were completely paralyzed, and the nutrition of the parts was so badly sustained that the slightest pressure would cause ulceration of a persistent character. This latter condition was rapidly relieved by frequent applications of the faradic current. Massage and passive movements of the fingers and forearm accomplished little toward correction of the deformity. The deformity of the hand and fingers was then corrected by forcible extension, under anesthesia, and a plaster of paris dressing was applied. Although there was an apparent improvement under this plan, the contracture would soon recur after removal of the splint. Becoming discouraged, I referred him to DR. H. M. SHERMAN, of San Francisco, who kindly interested himself in the boy's behalf. Dr. Sherman was of the opinion that relief could only be sought in permanent extension apparatus, attended with massage and forcible extension. After some months of constant attention to the case, I finally determined to resort to tendon lengthening. The first operation was done on April 1, 1894. The operation was interrupted by an unfortunate accident in the use of the anesthetic, and was not as thoroughly done as it would otherwise have been. The advantage gained, however, was positive and permanent. Following this, exercises for the limb were prescribed, and the hand was found to be generally useful. Thirteen months later, as the condition was still not perfect, I determined to do a second operation. In this instance, the incision was made high up on the forearm, over the bellies of the flexor muscles. The amount of lengthening thus obtained was fully three-quarters of an inch, and again the general improvement was pronounced. At the present the condition is as follows: With the hand slightly flexed upon the wrist, the fingers and thumb can be brought to full extension. The fingers are capable of grasping ordinary objects with probably one-half the normal power. The parts are well nourished, and with constant use I fully expect to see still further improvement. In this connection, the history of a fracture of the neck of the radius in the father of the lad is of interest. About two months ago, the patient was thrown forcibly from an engine cab window, alighting upon his elbow. A fracture of the neck of the radius resulted. Although the case has been carefully watched, and early passive motion resorted to, there has been an amount of inflammatory action entirely out of proportion to the injury received. From the first, the tendency to anchylosis was marked, and permanent locking of the joint has been avoided only by a resort to passive motion, applied by a power apparatus. In my opinion, this peculiar tendency to adhesive inflammation, attended by plastic exudative deposits, is an idiosyncracy which, perhaps, was shared by father and son.

California Northern District Medical Society.—DR. J. H. PARKINSON, Chairman of the Committee of Arrangements of the Northern District Medical Society, stated that the District Society would meet in Sacramento on the second Tuesday in October, and it would be necessary for this Society to take some action in the matter looking to the entertainment of the visitors. It would facilitate matters if the committee of the District Society were also appointed to act for the local Society. Upon motion, it was so ordered.

Experimental Therapeutics.—DR. D'ARCY POWER said there was no section of medical work that was more important than therapeutics. It had occurred to him that it would be well to inaugurate a movement in the Society with a view to collating and tabulating any experiments that might be made by members, as well as clinical investigations of new methods and new remedies. A blank could be prepared for this purpose, and a person selected to act as Secretary in receiving the blanks and compiling the results. He thought that in this manner much valuable material might be accumulated.

DR. J. H. PARKINSON said Dr. W. A. Briggs had brought up this very subject about two years ago, his suggestions being on the same lines as those of Dr. Power. Nothing had been done in the matter. It would rest very largely with the person acting as Secretary whether any practical results were attained.

On motion, Dr. Power was appointed to act as Secretary in this matter, and to prepare and present the necessary blanks for carrying out the proposed investigations.

Hysterectomy for Uterine Fibroid.—DR. T. W. HUNTINGTON, reported the following case: Mrs. S——, aged 38, was delivered of a still-born child on February 7, 1895. At that time it was discovered that she was suffering from a uterine tumor. I examined her on June 15th, and discovered what I believed to be a fibroid tumor, about the size of a small pineapple. Two days later, under ether, with Drs. W. A. Briggs, C. B. Nichols, and Power, I examined her again, but was not satisfied as to the exact condition. The uterine cavity was large, and lined with septic material. The cavity was carefully curetted. On the 29th of June I again examined her under ether, and clearly made out a fibroid, located in the left side of the uterus. The patient gave a history of frequent hemorrhages. There was also a slight, but continuous rise of temperature. Supra-pubic hysterectomy was advised, and undertaken on July 1st. After tying off the uterine attachments on either side, the organ was freed down to its junction with the vaginal wall. An incision was then made, separating the vaginal wall from the os uteri. The operation was completed by closing the vaginal orifice with silk sutures, and covering the floor of the pelvis with the peritoneum dissected from the anterior surface of the uterus. The abdominal wound was then closed in the usual manner. The patient, whose condition was none of the best prior to the operation, suffered greatly from the shock, and reaction was only secured by liberal subcutaneous injections of warm salt solution, whisky, and strychnine. For the first three days subsequent to the operation she vomited almost incessantly, but was fairly well nourished by rectal alimentation. On the sixth day she had a slight chill, with a corresponding rise of temperature. The cause of this disturbance was found to lie in the formation of an abscess on the lateral surface of the left thigh at the seat of a salt water injection. This was opened and evacuated, and treated in the usual manner; at about the same time an unusual and awkward accident occurred. Two of the stitches in the abdominal wall gave way, and a loop of small intestine protruded; this was replaced immediately, the wound reclosed, and subsequent healing of the incision proceeded rapidly. Although the patient did well so far as the main operation is concerned, she never fully recovered from the thigh abscess. There seems to have been constitutional infection at the outset from this source. The abscess cavity never healed, and the patient died five weeks after the operation from septicemia.

DR. HUNTINGTON also reported a case of removal of the parotid gland in a girl aged 17. [To be published.]

DR. HUNTINGTON then read a paper on "Surgery of the Gall Bladder and Gall Ducts." [Published at p. 587.]

DR. J. H. PARKINSON: The Murphy Button is an ingenious mechanical appliance, and it seems to me that in quite a number of cases it will be used successfully. Anything that will shorten the time of manipulation of the abdominal contents, as well as diminish the length of exposure, is of distinct value. To an inexperienced operator, the making of an intestinal anastomosis without any mechanical aid, is an exceedingly difficult matter, and an appli-

poor in

ance of this kind, if successful in its application, will be very valuable. A number of cases have been reported in which the button has been successfully employed; and, with a judicious selection of cases, it must certainly prove a great advantage.

Dr. G. L. Simmons: Dr. Huntington speaks of an early operation having advantages over one performed later, but it seems to me that there will always be great difficulty in recognizing these cases in the early stages. The gall-bladder, in itself, is rather difficult to define, and many of the symptoms are obscure in the beginning. It is also a common thing to find in *post-mortem* examinations serious conditions of the gall-bladder which had not been suspected during life. I have often been surprised in making autopsies, to find the condition of this viscus and the number of calculi that were present without causing any serious inconvenience. None of the concretions had engaged in the duct, and so had not given rise to trouble. Undoubtedly, if cases of this kind could be recognized very early and the obstructions removed, a very valuable point would be gained and many a life saved.

Dr. Huntington in replying, said: It is a difficult matter for the surgeon to determine when operative procedures are in place. This is true not only in reference to the gall-bladder, but in general surgical practice. Sooner or later the surgeon will be brought face to face with a case in which he has authority for operative treatment and where the necessity therefor seems clearly apparent, but where he will be led to faulty conservatism on account of the fear of being charged with a tendency to over operative zeal. As to determining when to operate in gall-bladder cases, it may be stated that an operation is justifiable when the viscus is distended with fluid, when there are recurrent attacks of biliary colic attended by icterus, and localized peritonitis. Most of us can recall instances where this train of symptoms has been present with varying frequency. We certainly should never forget the aphorism of Jonathan Hutchinson that "early operations are successful operations."

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, August 13, 1895.

The President, C. C. Wadsworth, M.D., in the Chair.

New Member.—J. Leffler, M.D., was duly elected a member of the Society.

The Artificial Feeding of Infants.—Dr. W. F. Cheney read a short paper upon this subject. He said: First, as to quality. In selecting the food we must accept the fact that the breast milk is the best, and the standard. Therefore, in preparing a food we endeavor to get as near to this standard as possible. It is the aim of modern artificial feeding of infants, to put together in the laboratory such ingredients as will give us the nearest approach to mother's milk. The Rotch formula, built on analysis of human milk, is unquestionably the best substitute that we possess. In this, cow's milk is taken and either added to or taken from, when we arrive at the proper food. There is a great difference between cows', and human milk, both in quality and quantity of the lacalbumin and casein. This latter, precipitated by acids, forms large curds with cows', and very fine feathery flakes with human milk. Then comes the relation of the casein to the lacalbumin, this latter being precipitated by heat. The fat is an important constituent in milk, and varies but little between human and cows, there being about 3.75 per cent. in human and 4 per cent. in cows. Of sugar, we find in human milk about 7 per cent. against a 1.4½ per cent. in cows. The residual ash in cows' milk is 7 per cent. against 2 per cent. in human milk. Now, in order to overcome all this and to make an ideal substitute for human milk, Rotch devised his formula. At the present time more attention is paid to quality than quantity, so his formula, or some modification of it, is the best that we possess. We can modify it to suit each individual case; the symptoms will indicate just which ingredient to raise, lower, or omit. Now it might be asked why the many so-called "foods" on the market, as Mellins', Malted Milk, Horlick's, etc., are not suitable. They are not fresh foods, in that they have all been subjected to desiccation, to a more or less high temperature, and the quality is destroyed; they therefore are lacking in the anti-scorbutic property of fresh milk foods. There is no doubt but that some children thrive on these, as they do on condensed milk, though in this latter preparation, the same objection holds good, and the amount of sugar is far too great. Now, a few words as to the feeding of the infant. The most important point is the quality. Nearly all present here will bear me out when I say that in nearly all cases of artificially fed infants, the mother or nurse always wants to feed the child far too much. It has been demonstrated that the stomach, at birth and for the first week, has only a capacity of one ounce, at two weeks two ounces, and so on, relatively an ounce for a week until up to six ounces; then after six months keep at about eight ounces until the child is a year old, when some other additional food can be given it. These figures are not exact, but easy to remember and near enough. Next, as to the interval of feeding. The common fault of all mothers and nurses is to feed the child whenever it frets and is crying. This is wrong, for it is not given them as a food but as a sedative, and is just about as unreasonable as an adult eating at all hours. How an adult can give a baby food every fifteen minutes or so, or whenever the child cries, when if the same adult would eat as often herself, she would have "dyspepsia" and be a great sufferer, is more than I can understand. At first the interval should be about one and a half hours; at six weeks, give food every two hours; three months, every three hours; and at six months give every four hours and keep it there. At first the mother will object and declare that you are starving the infant, but she will soon see how much better the child thrives if so fed. Now, as to the manner of feeding. We all know that we have seen failures in infant feeding, both in private and in clinical practice, not due to quality, quantity, or irregularity, but due to bolting the food. We cannot do so ourselves unless we suffer thereby. The child is given the bottle and literally "swills" it down, a whole bottle full, which is frequently the source of an attack of indigestion. The nurse or mother should handle the bottle and allow the child ten or fifteen minutes to drink it. At first both child and mother may object, but the child will steadily improve under this deliberate manner of feeding, and the parents will keep it up, as they should.

Dr. G. W. Davis said: We are always at our wit's end to choose a suitable food for those infants that have to be fed artificially, entirely or in part. I believe, with Dr. Cheney, that the nearer we can approach to human milk in composition, the nearer we come to the ideal, and Rotch's formula is undoubtedly the best. Nearly all the artificial foods are deficient and are often harmful. Years ago we had but one brand of condensed milk and every one wanted it. Infants appeared to thrive on it, due in great part, no doubt, to the sugar it contained, but in my mind this was not a healthful gain. The infants were deficient in vitality and were flabby Sometimes we cannot avoid using artificial foods, and then I generally recommend Mellin's Food or Malted Milk. The latter is good until the child reaches eight or nine months, when we should begin to give other food, such as rice, etc. As to the time and quantity of feeding, I concur with the author, and I also believe that more infants are overfed than under-fed. Among the ignorant and young mothers, with their first baby, the child is given the bottle every time it cries, which is very wrong. Many times the child cries when it is colicy from being over-fed.

Dr. L. M. F. Wanzer: To all of the rules for infant feeding we have exceptions. I have in mind one case, in which the child lost weight right along, though the food was increased in quantity as directed. Upon seeing the child, after an interval of one month, I realized that it was being insufficiently nourished, and began giving up to eighty or ninety ounces a day. The mother had died of phthisis when the child was six months old, but it is now as hearty and strong a child as one could wish to see.

Dr. C. G. Kuhlman said: In laying down rules for the artificial feeding of infants, we must take two things into consideration. In syphilitic and consumptive children we can have no rules. In Northern Europe and in Sweden, for the first few days of its life, the infant is given fennel seed tea. After this a preparation is made from dry wheat bread, similar to "zweibach." This is put in a small cheese cloth bag, and on this the baby sucks all day. This is the only artificial food these babies get, and they are healthy. I do not doubt that the Vikings of old were thus fed in their infancy. I do not believe much in the many foods on the market. Farina is my favorite food for infants; one part of farina and three parts of water, boiled for ten minutes, makes an excelance of this kind, if successful in its application, will be very valuable. A number of cases have been reported in which the button has been successfully employed; and, with a judicious selection of cases, it must certainly prove a great advantage.

Dr. G. L. Simmons: Dr. Huntington speaks of an early operation having advantages over one performed later, but it seems to me that there will always be great difficulty in recognizing these cases in the early stages. The gall-bladder, in itself, is rather difficult to define, and many of the symptoms are obscure in the beginning. It is also a common thing to find in *post-mortem* examinations serious conditions of the gall-bladder which had not been suspected during life. I have often been surprised in making autopsies, to find the condition of this viscus and the number of calculi that were present without causing any serious inconvenience. None of the concretions had engaged in the duct, and so had not given rise to trouble. Undoubtedly, if cases of this kind could be recognized very early and the obstructions removed, a very valuable point would be gained and many a life saved.

Dr. Huntington in replying, said: It is a difficult matter for the surgeon to determine when operative procedures are in place. This is true not only in reference to the gall-bladder, but in general surgical practice. Sooner or later the surgeon will be brought face to face with a case in which he has authority for operative treatment and where the necessity therefor seems clearly apparent, but where he will be led to faulty conservatism on account of the fear of being charged with a tendency to over operative zeal. As to determining when to operate in gall-bladder cases, it may be stated that an operation is justifiable when the viscus is distended with fluid, when there are recurrent attacks of biliary colic attended by icterus, and localized peritonitis. Most of us can recall instances where this train of symptoms has been present with varying frequency. We certainly should never forget the aphorism of Jonathan Hutchinson that "early operations are successful operations."

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, August 13, 1895.

The President, C. C. Wadsworth, M.D., in the Chair.

New Member.—J. Leffler, M.D., was duly elected a member of the Society.

The Artificial Feeding of Infants.—Dr. W. F. Cheney read a short paper upon this subject. He said: First, as to quality. In selecting the food we must accept the fact that the breast milk is the best, and the standard. Therefore, in preparing a food we endeavor to get as near to this standard as possible. It is the aim of modern artificial feeding of infants, to put together in the laboratory such ingredients as will give us the nearest approach to mother's milk. The Rotch formula, built on analysis of human milk, is unquestionably the best substitute that we possess. In this, cow's milk is taken and either added to or taken from, when we arrive at the proper food. There is a great difference between cows', and human milk, both in quality and quantity of the lacalbumin and casein. This latter, precipitated by acids, forms large curds with cows', and very fine feathery flakes with human milk. Then comes the relation of the casein to the lacalbumin, this latter being precipitated by heat. The fat is an important constituent in milk, and varies but little between human and cows, there being about 3.75 per cent. in human and 4 per cent. in cows. Of sugar, we find in human milk about 7 per cent. against a 1.4½ per cent. in cows. The residual ash in cows' milk is 7 per cent. against 2 per cent. in human milk. Now, in order to overcome all this and to make an ideal substitute for human milk, Rotch devised his formula. At the present time more attention is paid to quality than quantity, so his formula, or some modification of it, is the best that we possess. We can modify it to suit each individual case; the symptoms will indicate just which ingredient to raise, lower, or omit. Now it might be asked why the many so-called "foods" on the market, as Mellins', Malted Milk, Horlick's, etc., are not suitable. They are not fresh foods, in that they have all been subjected to desiccation, to a more or less high temperature, and the quality is destroyed; they therefore are lacking in the anti-scorbutic property of fresh milk foods. There is no doubt but that some children thrive on these, as they do on condensed milk, though in this latter preparation, the same objection holds good, and the amount of sugar is far too great. Now, a few words as to the feeding of the infant. The most important point is the quality. Nearly all present here will bear me out when I say that in nearly all cases of artificially fed infants, the mother or nurse always wants to feed the child far too much. It has been demonstrated that the stomach, at birth and for the first week, has only a capacity of one ounce, at two weeks two ounces, and so on, relatively an ounce for a week until up to six ounces; then after six months keep at about eight ounces until the child is a year old, when some other additional food can be given it. These figures are not exact, but easy to remember and near enough. Next, as to the interval of feeding. The common fault of all mothers and nurses is to feed the child whenever it frets and is crying. This is wrong, for it is not given them as a food but as a sedative, and is just about as unreasonable as an adult eating at all hours. How an adult can give a baby food every fifteen minutes or so, or whenever the child cries, when if the same adult would eat as often herself, she would have "dyspepsia" and be a great sufferer, is more than I can understand. At first the interval should be about one and a half hours; at six weeks, give food every two hours; three months, every three hours; and at six months give every four hours and keep it there. At first the mother will object and declare that you are starving the infant, but she will soon see how much better the child thrives if so fed. Now, as to the manner of feeding. We all know that we have seen failures in infant feeding, both in private and in clinical practice, not due to quality, quantity, or irregularity, but due to bolting the food. We cannot do so ourselves unless we suffer thereby. The child is given the bottle and literally "swills" it down, a whole bottle full, which is frequently the source of an attack of indigestion. The nurse or mother should handle the bottle and allow the child ten or fifteen minutes to drink it. At first both child and mother may object, but the child will steadily improve under this deliberate manner of feeding, and the parents will keep it up, as they should.

DR. G. W. DAVIS said: We are always at our wit's end to choose a suitable food for those infants that have to be fed artificially, entirely or in part. I believe, with Dr. Cheney, that the nearer we can approach to human milk in composition, the nearer we come to the ideal, and Rotch's formula is undoubtedly the best. Nearly all the artificial foods are deficient and are often harmful. Years ago we had but one brand of condensed milk and every one wanted it. Infants appeared to thrive on it, due in great part, no doubt, to the sugar it contained, but in my mind this was not a healthful gain. The infants were deficient in vitality and were flabby Sometimes we cannot avoid using artificial foods, and then I generally recommend Mellin's Food or Malted Milk. The latter is good until the child reaches eight or nine months, when we should begin to give other food, such as rice, etc. As to the time and quantity of feeding, I concur with the author, and I also believe that more infants are overfed than under-fed. Among the ignorant and young mothers, with their first baby, the child is given the bottle every time it cries, which is very wrong. Many times the child cries when it is colicy from being over-fed.

DR. L. M. F. WANZER: To all of the rules for infant feeding we have exceptions. I have in mind one case, in which the child lost weight right along, though the food was increased in quantity as directed. Upon seeing the child, after an interval of one month, I realized that it was being insufficiently nourished, and began giving up to eighty or ninety ounces a day. The mother had died of phthisis when the child was six months old, but it is now as hearty and strong a child as one could wish to see.

DR. C. G. KUHLMAN said: In laying down rules for the artificial feeding of infants, we must take two things into consideration. In syphilitic and consumptive children we can have no rules. In Northern Europe and in Sweden, for the first few days of its life, the infant is given fennel seed tea. After this a preparation is made from dry wheat bread, similar to "zweibach." This is put in a small cheese cloth bag, and on this the baby sucks all day. This is the only artificial food these babies get, and they are healthy. I do not doubt that the Vikings of old were thus fed in their infancy. I do not believe much in the many foods on the market. Farina is my favorite food for infants; one part of farina and three parts of water, boiled for ten minutes, makes an excellent food, excelling all the artificial foods in nutriment; and a little soda may be added if acidity exists. The speaker regretted the absence of wet nurses in this country, such as were readily obtainable in the old world.

Dr. K. Pischl: It may be of interest to mention that in the rural regions of the Tyrol, the child is given, on the second or third day, a mush made of wheat; in the cities, where the physicians have more supervision, and where the people have been better educated, this practice is not so prevalent. The children seem to be healthy, but I do not know whether we can draw the conclusion that it is because they eat this food that they live, or whether it is merely a case of the survival of the strongest. The infant mortality is terrible in that country. I believe about one-third of them die. There is hardly any family, having six or ten children, but have lost one-third or more of them, and nearly all in infancy.

Dr. Adelaide Brown: I am much impressed with Dr. Pischl's remarks, and they seem to be correct. At the Polyclinic, at Leipsig, I was surprised at the number of women who had borne eight or ten children, and raised on an average three or less. This is, no doubt, due to the want of proper feeding. A point that is very important in the artificial feeding of infants, is that they should be weighed every week. They often gain for a week and then go back, though seemingly looking well. The mother should weigh the child, and if it loses bring it to the doctor. We can then interfere sooner than if we wait until we *see* the loss. When teething comes the child is not ready for this trial.

Dr. E. E. Kelly: In some parts of the old world the great mortality amongst children is also due to the unsanitary surroundings. The dwelling house is shared with chickens, hogs, and cattle; and even the wells are so situated that they catch all the drainage from the barn-yard. All these things are now being abated, and better sanitary arrangements are being adopted.

Dr. Lucia M. Lane said: The artificial feeding of infants in a private house, and in an institution or hospital, is a very different thing. In a private house almost any food can be used with success; in the hospital this is very different. My experience in the Florence-Crittenton Home, where from 20 to 40 children, from one day to eighteen months old are sheltered, has been with the Rotch formula, and nothing but the warmest praise can be given it.

Dr. Virginia Smiley said: When we started with the Rotch formula there was a misunderstanding on the part of the nurses, and we had just moved into our new quarters, where we intended to take care of the infants in a different manner. For 48 hours the children were confined, six or eight in a room, and they had rapidly fallen away. The stools were very offensive, and in every way their condition was alarming. We hastened to make changes; that is, placing them two in a room, and under the care of one woman. By this means, and by careful nursing, for the first few weeks they were finally brought up to the standard. The infants were weighed every week, and their stools carefully examined. They were certainly the most normal stools for artificially fed infants that I have ever seen.

Dr. Cheney, in replying, said: During the past decade modern surgery and gynecology have developed, and pediatrics has been established, and sound scientific rules and views have been promulgated for infant feeding that we cannot neglect. Regarding Horlick's food, there was lately a case in the Clinic, at Cooper Medical College, of infantile scorbutus in a child five months old, that had been fed on Horlick's food. This was immediately withdrawn, and the child treated with a food consisting of cream, cow's milk, and oatmeal water, and with it a spoonful of orange juice three times a day. Such a case occurring ten years ago would not have been attributed to the artificial food. This case tends to support my statement that the dry foods are lacking in the anti-scorbutic elements. As to the practice of giving flour and starch foods before three months of age Dr. Kuhlman knows, as well as I do, that this cannot be digested, no starch digesting principle being present. Regarding the food of the infant Vikings, I am unable to express an opinion, but we know from history that they were a surly, morose people, evidently suffering from chronic dyspepsia.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, July 20, 1895.

The President, WM. WATT KERR, M.D., in the Chair.

Dr. R. Beverley Cole.—THE PRESIDENT stated that at this meeting an informal reception would be tendered the President of the American Medical Association, Dr. R. Beverley Cole, and spoke as follows: "It is with the greatest pleasure that I introduce to the Academy to-night the President of the American Medical Association, who, until a few weeks ago, was just Dr. R. Beverley Cole. Since then, like the proverbial Yankee Doodle, he went to town, and returned with a feather in his cap, and we all admire that feather and would be more than proud to place it in our cap. In Dr. Cole, we have a true friend, a hard worker, a good opponent, honorable in all things and at all times, and not in the least changed by the addition of this new dignity. Mr. President of the American Medical Association, the California Academy of Medicine, in asking your presence here this evening, does so to show, in a small way, its appreciation of the honor that has been conferred upon you, the highest honor that can be given to a medical man. In the name of the Society I welcome you this evening and congratulate you, and hope that you may be long spared and that the future will be as bright as the past."

DR. R. BEVERLEY COLE: "It is said that where two or three are gathered together in the name of the Lord, He is also there. And I feel that He is here this evening, for I know that those who honor me this evening do so of their own accord. I have been honored by many and in many places, but I can not but appreciate that most when given by those who know me and in my own home. Talk is cheap, it is said, but actions speak louder than words, and though I am a stranger to your Society, and this is the first time that I've had the distinguished honor to be present at any of your meetings, I feel that this reception speaks louder than any words that could have dropped from your lips. If I only live long enough to build in your breasts, each severally, the same home that I feel is in your President's, and others who have known me long, then will I feel that my life's work is done. It is true that I am proud of the honor conferred upon me; it is an exalted one, one that anyone would reach out for and accept, and I do not consider it so much of a personal matter as a loyalty to our people and our State; this alone would prompt me to accept it. I have always been loyal to my country, its people, and the medical profession, and have always striven to advance it and medical education, the best part of my life having been spent in its cause. In my work before the American Medical Association at its next meeting, I want the support of the Academy and of the medical profession of the State to stand by me and give me strength. I do not want to be the only disciple of this great and glorious State; therefore, come to Atlanta with me. Let your presence show the East that our State is not without its representatives. For twenty years I was the single representative of this coast. Will it always be so? Why, your pride of State should be enough to cause you to be present and show them that we are not out of the world and not aborigines. Gentlemen of the Academy, I thank you for this most cordial reception, and trust I may meet you many times, here or elsewhere; and when I meet you, rest assured that you will always find a warm place in my heart for you."

The Academy then adjourned, according to the programme, to a reception and banquet tendered to Dr. Cole in honor of his election to the Presidency of the American Medical Association.

Regular Meeting June 15, 1895.

Excision of the Elbow.—DR. G. F. SHIELS read a few remarks on excision of the elbow. The cases reported had occurred long ago and he had watched them very carefully. Quite lately he had received a letter from one of the cases, residing in the Sandwich Islands, to the effect that with the operated arm she could raise a three pound weight above her head, which, even with her steel joint, which he did not know whether she now wears, seems to be remarkable. In this operation, it shows that we have a wonderful chance of good success, even though the joint is extensively diseased, and we have to remove large pieces of the bones.

DR. E. E. KELLEY said: I think the members of the Academy will remember the elbow in a case that I exhibited here some time ago. This man had been operated on fifteen years before by Dr. Brigham and the result had been good. He had very good motion with pronation and supination. I would like to ask Dr. Shiels how he accounts for the resumption of the functions when the muscles are atrophied, and the attachments are taken away. I should also like to inquire how long after an injury to the elbow with resulting ankylosis could a resection be done and good results be expected.

DR. J. H. BARBAT said: Even though the attachments to the bones are removed, we have still the deep fascia for the muscles to pull against, the muscles really arising from the inter-muscular septum. Undoubtedly, the arm is not so strong, but then it is sufficient to use ordinarily, and more useful than any other ankylosis. I believe the extension spoken of is only from the passive weight of the forearm and flexion from the biceps and brachialis anticus. The speaker inquired why so much bone had been removed.

DR. SHIELS said: I think that it is the usual proceeding to perform this operation sub-periosteally, thereby saving, to a certain extent, the relations of the muscular origin. The insertion is blended with periosteum and tendon. In an ordinary excision, we get the loss of the fulcrum power and expect an inevitable contraction, and when we go beyond a certain point, we get a flail action. The idea is to get a mechanical hinge, the collar about the forearm being quite loose. The passive extension spoken of by Dr. Barbat, is largely due, as he says, to weight. The great point is to avoid destroying the periosteum. The reason so much bone had been removed was because it was all diseased, evidently a tubercular osteitis. In reply to Dr. Kelley, he would say: So long as the muscles react to the faradic current, they are capable of further devolopment, and an operation may be undertaken.

Superfetation.—DR. E. E. KELLY said: I had under my care a woman who was four months pregnant. Being sent for in a hurry, I found she had miscarried. There was some bleeding after this for some time, and on examination I found and brought away another fetus of about six or eight weeks. There seemed to be no villi and it was evidently dead for some time, as it appeared degenerated. This case seems a puzzler, for it brings up the old question of superfetation. It might be explained that there were two ova impregnated at the same time, and one received the principal part of the nourishment, the other being starved. Then the question rose as to whether or not it had not been the means of bringing on the abortion.

DR. J. F. MCCONE said: While in London, I saw at one of the hospitals, a specimen of a double uterus, in one cavity of which there was a four months' fetus, and in the other, one that had not yet completed its second month.

DR. J. H. BARBAT said: We have often two ova: one may receive more nourishment than the other and may become flattened out for the other's growth. I have met with such conditions. Just lately there was one that was of about five months and another of about three months, the smaller one being flattened to one side.

THE PRESIDENT said: There have been many cases of bifid uteri, and we may have such cases and not note them.

Pseudo-Arthroses Following Fracture.—DR. GEO. ROTHGANGER reported a case of pseudo-arthrosis following fracture of the humerus, and presented the specimen from the *post-mortem* examination. The pseudo-arthrosis resembles a ball and socket joint. The patient's history was as follows: Ten years ago was stabbed in the left side, involving the diaphragm. Four years ago he had considerable pain in the back left side; was treated for pleurisy. Then a lumbar abscess formed and pus opened posteriorly. Then below Poupart's, pus was found and an abscess opened. Morphine had been given for pain and to control constipation enemas were used. On several occasions an obstruction of the bowels seemed to appear, but all went well for a month, when the obstruction reappeared. It was thought that this obstruction was at the junction of the transverse and descending colon, and an operation to use the Murphy button was decided on. So many adhesions were present at the point of turning, and the mesentery was so short, that nothing could be done except to make an artificial anus. The patient died later, and at the autopsy this seven-year-old ununited fracture was found. Where the descending and transverse colons meet, they were adherent to the diaphragm; a tight band bound them down and a portion was pushed into the pleura. The entire pleura was adherent; there must have been a traumatic pleuritis. The right lung was tubercular.

Dr. G. F. Shiels asked why cases of ununited fracture of the humerus were so much more common than those of any other bone? Such is a fact, and it seems to point out that the bones are not immobilized sufficiently, as many surgeons claim. I might suggest that owing to the large amount of leverage of the forearm, the lower fragment is always in motion.

Dr. J. H. Barbat thought by the use of a perfectly reliable splint, the results would be better. He had had some experience with Mr. Hoppe's universal splint, and so far the results had been good—it seemed to meet every requirement—by an axilla crutch, the bones, if overlapping, can be brought down and the bandage applied.

Dr. Shiels: It is not wise to use the axilla as a point of fixation; it would be the same as the perineal band for Liston's long splint.

Dr. Barbat: It is suggested to use the axilla crutch only in oblique fractures, and then only for a few days.

SAN FRANCISCO MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting, August 5, 1895.

C. N. Ellinwood, M.D. in the Chair.

The Antiseptic Treatment of Wounds.—Dr. A. G. Rosenthal read a translation of an article by Henle, from the *Archiv. für Klinische Chirurgie*, entitled "The Antiseptic Treatment of Wounds."

Dr. L. C. Lane said: The antiseptic treatment of wounds has occupied the attention of surgeons more during the last twenty years, than any other branch of surgery. In 1874, the speaker visited Edinburgh, to see Lister. He soon became convinced that work was being done there such as was done nowhere else in the world. He saw Anandale perform a hip-joint resection under the new system. The vapors and sprays which were used at that time interfered with vision, espicially if the operator wore glasses. It was then believed that this method of wound treatment could not be used in abdominal surgery. Lister was not satisfied with carbolic acid as an antiseptic, and, as his assistant said, he tried something new every little while. His latest experiments are with the cyanide of mercury. This has something to be said for it, but it is so violent a poison that it must be used with great caution. In Virchow-Hirsch's *Jahresbericht*, last year, there was an article on this subject by Bardeleben, an old man, but who is still at work with Bergmann, and is an active reviewer. He stated that the antiseptic problem is getting down to this: Cleansing the surface, cleansing the instruments, and cleansing the dressings. After the first cut, none of the antiseptic solutions need be used. The speaker further said he was satisfied that we often overdo this matter of antisepsis, but on the other hand, any one who neglects the use of this treatment of wounds, is recreant of his duty.

Dr. A. B. McKee said in the clinics of Europe to-day, most operators carry out this plan of disinfecting everything beforehand, and using very little irrigation.

Dr. W. F. Southard said for nearly two years he had used nothing but sterilized water in operations on the eye, but before beginning the operation the instruments, and the parts of the face around the eye, are cleansed. Solutions of bichloride of mercury, even in so great dilution as 1:2000, are irritating to the eye.

New Method of Introducing Gauze Packing.—Dr. A. W. Perry exhibited a simple means of introducing gauze packing into narrow cavities, such as the uterus, deep sinuses, and the like. In consists of fitting a gelatine capsule over the end of the strip of gauze on the tip of a probe. The capsule prevents the probe being pushed through the gauze, and is at the same time no hindrance to the introduction; it is in a short time absorbed.

Favus Treated by Reinforced Congealation.—Dr. Albert Abrams presented a case of favus; illustrating a method of treatment advocated by him two years ago. The achorion schoenleinii, the parasitic cause of favus, is destroyed by exposure, for even a short time, to a freezing temperature. In this case no bactericides were used, but the surface of the scalp was frozen, a limited area at a time, with the result that the disease has been stayed and rapid cicatrization has taken place. To increase the effect of freezing, Dr. Abrams injects a small amount of water beneath the scalp and uses the rhigolene spray to the point of freezing that mass of water. This method he designates "reinforced congealation." Dr. Abrams then exhibited cultures of the achorion schoenleinii and preparations, under the microscope.

Dr. L. C. Lane spoke of the comparative rarity of the disease in California. When he studied in Jefferson Medical College, half the cases of skin diseases in the clinic were favus. Dunglison's method of treatment was to shave off all the hair and tell the parent to apply a large flaxseed poultice for three days, and then to return. He then took a cap of linen, covered outside with rubber, and filled it with pine tar. In two or three weeks the cases were always cured. The application may be styled "nasty," but it is efficient and cheap.

Dr. A. W. Perry said: In favus, the parasite resides deeply in the scalp at the base of the hairs. If the parasiticide is in watery solution, the oil of the sebaceous glands repels it. Ointments will give better penetration, especially if applied with rubbing. Ether will dissolve one grain of bichloride of mercury to the ounce. This solution, if brushed on the surface, will cure very quickly obstinate cases of sycosis, without making much irritation. Koster uses liquid oil of tar with iodine.

Dr. Emmet Rixford asked if it had been demonstrated whether in the use of the rhigolene spray the benefit was due to the freezing *per se*, and not to the rhigolene. Rhigolene is an antiseptic of some power, and will penetrate deeply, not being repelled by the oil of the scalp, but dissolving it. Had rhigolene been used as a simple application on lint, and had freezing by means of cracked ice and salt been found efficient? If Dr. Abrams' theory is correct, the disease is one which, in Eastern cities, in winter, could be managed very easily, the patient needing only to use a cap filled with snow.

Dr. Abrams said that as good results had been reached by the process of freezing with other methods than the rhigolene spray.

Determination of Insufficiency of the Ocular Muscles, Without the Use of Prisms.—Dr. W. F. Southard demonstrated an apparatus by which deficiencies in the strength of the ocular muscles could be determined without the use of prisms. It consists of a large sheet of black cardboard, with a narrow slit in the center, set up at a given distance from the patient. A number of feet beyond the cardboard, two candles are set up at such distance apart that the rays from one candle flame will pass through the slit into the eye on the opposite side, and the rays from the second flame into the other eye. By measuring the distances mentioned, and noting when the patient is enabled to superimpose the retinal images so that he sees but one flame, data are acquired by which to detect and to measure deficiency in power of any one of the rectus muscles.

REVIEWS AND NOTICES.

Essentials of Diagnosis. Arranged in the form of questions and answers. Prepared especially for students of medicine. By Solomon Solis Cohn, M. D. and Augustus A. Eshner, M. D. (Illustrated.) Philadelphia: W. B. Saunders.

This book fulfills the wants of the student in an exceptionally interesting manner. The treatment of the various diseases enumerated would have contributed materially to the value of the book. Clearness is occasionally sacrificed for brevity.

Essentials of Bacteriology—being a concise and systematic introduction to the study of microörganisms for the use of students and practitioners. By M. V. Ball, M. D., Physician to the Eastern State Penitentiary at Philadelphia. Second edition. With eighty-one illustrations, some in colors, and five plates. Philadelphia: W. B. Saunders. pp. 206. Price, $1.00.

This little volume can be highly recommended to both the physician and the student. It presents the essential facts of modern bacteriology in a succinct and lucid manner, and with its aid, unaccompanied by previous training, one can thoroughly carry out any bacteriological investigation.

THE POCKET MATERIA MEDICA AND THERAPEUTICS; A Résumé of the Action and Doses of all Official and Non-Official Drugs now in common use. By C. Henri Leonard, A. M., M. D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology in the Detroit College of Medicine. Second edition revised and enlarged. The Illustrated Medical Journal Company: pp. 367. Price, cloth (prepaid), $1.

This volume is one of the class that is more frequently begotten by the enterprise of the publisher than by the desire of the writer to communicate anything of importance to the profession. It is simply a series of headings on each subject, such as might constitute the outlines in a student's note-book, but is too deficient in the information furnished, even relating to important drugs, to merit a place among the existing works upon materia medica and therapeutics. We regret that we cannot recommend it to our readers.

THE CARE OF THE BABY; A Manual for Nurses and Mothers, containing Practical Directions for the Management of Infancy and Childhood, in Health and in Disease. By J. P. Crozer Griffith, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Professor of Clinical Medicine in the Philadelphia Polyclinic and School for Graduates in Medicine. Philadelphia: W. B. Saunders; pp. 362. Price, $1.50.

This book is written expressly for mothers and nurses, and deals with many of those problems that are a continual source of anxiety to the young matron. The advice given to the expectant mother is good hard sense, perfectly free from the foolish fables and practices which constitute the great bulk of the written and unwritten lore that swells the history of maternity. The mother who is so unfortunate as to be unable to nurse her child will receive much information from the chapter on "Feeding the Baby." The latter pages of the book are devoted to "The Sick Baby," but this is not to be regarded as an attempt to render a mother capable of "doctoring" her own children; it merely furnishes such information as will make her a more capable nurse in the event of sickness and that will enable her to do something for the relief of her child until skilled aid can be obtained. We regard this as a work which the family physician can with safety recommend to his patients.

TRAVAUX D'ELECTROTHÉRAPIE GYNECOLOGIQUE ARCHIVES SEMESTRIELLES D'ELECTROTHERAPIE GYNECOLOGIQUE Fondées et publiées par Le Dr. G. Apostoli, Vice-Président de la Société Francaise D'electrothérapie, etc. Paris: Société d'Editions Scientifiques 4, rue Antoine-Dubois, 4; pp. 720. Price, par l'envoi d'un mandat-poste de douze francs.

This work consists of numerous foreign contributions to gynecological electro-therapeutics translated into French and brought together in one volume. More than half of them are either of English or of American origin, and they all attest the value of Apostoli's method. The surgical bias which, just now, manifests itself with such violence in the medical profession, is little inclined to accord a rational consideration to the claims of electricity. By constant if not damnable iteration of the danger and impotence of electricity the surgeon possesses the field—by what right certainly remains in part to be demonstrated. Apostoli has done well, therefore, in focussing the evidence and, as far as the equation of person and disease may permit, submitting the question to the test of statistics.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held September 3, 1895, the following were granted certificates to practise medicine in this State:

George Blumber, Sierra Madre; Cooper Med. Coll., Cal., Dec. 4,'91.
Augustus Frank Browne, San Francisco; Med. Dept. Univ. of California, July 13,'95.
Joseph Austin Champion, Anaheim; Med. Coll. of Ohio, March 7,'88.

Clarence F. Dickenson, San Francisco; Med. Dept. Univ. of California, Nov. 20,'94.
H. B. Emerson, San Francisco; Med. Dept. Univ. of California, July 13,'95.
William Wesley Fitzgerald, Stockton; Jefferson Med. Coll., Pa., May 15,'95.
Jacob Goldstein, New York; Bellevue Hosp. Med. Coll., N. Y., March 25,'95.
Robert F. Gray, San Francisco; Med. Dept. Univ. of California, July 13,'95.
Frank Heitzig, South Riverside; St. Louis Med. Coll., Mo., March 8,'82.
Edward K. Hopkins, San Francisco; Med. Dept. Univ. of California, July 13,'95.
F. M. Pottenger, Monrovia; Cincinnati Coll. Med. and Surg., O., April 3,'94.
Frederick A. Rinne, San Francisco; Med. Dept. Univ. of California, July 13,'95.
Daniel Smith, Turlock; Mo. Med. Coll., Mo., March 3,'87.
A. M. Todd, San Francisco; Med. Dept. Univ. of California, Feb. 10,'64.
Albert John Villain, San Francisco; Med. Dept. Univ. of California, July 13,'95.

REFUSED.

K. C. Sapers, San Francisco.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from August 20, 1895, to September 20, 1895.

First Lieutenant John S. Klup, Assistant Surgeon, is relieved from temporary duty at Fort Walla Walla, Wash., and will proceed to join his proper station, Fort Spokane, Wash. Par. 1, S. O 127, Dept. of the Columbia. Aug. 30, 1895.

Leave of absence for ten days, to take effect about the 20th instant, is granted Captain William Stephenson, Assistant Surgeon. Par. 1, S. O. 139 Dept. of the Columbia, Sept. 18, 1895.

Leave of absence for one month, to take effect about the 5th proximo, is granted Major J. B. Girard, Surgeon. Par. 2, S. O. 113, Dept. of Cal., Sept. 19, 1895.

Captain Marlborough C. Wyeth, Assistant Surgeon, is relieved from duty at the Army and Navy General Hospital, Hot Springs, Arkansas, and ordered to Fort Huachuca, Arizona, for duty.

First Lieutenant Charles E. B. Flagg, Assistant Surgeon, upon his return from duty in the field, will be relieved from duty at Angel Island, California, and ordered to Fort Hancock, Texas, to relieve First Lieutenant Francis A. Winter, Assistant Surgeon.

First Lieutenant Winter, on being thus relieved, is ordered to Fort Grant, Arizona, for duty, relieving First Lieutenant George M. Wells, Assistant Surgeon.

Lieutenant Wells, on being thus relieved, is ordered to Fort Mason, Cal., for duty, relieving Captain William L. Kneedler, Assistant Surgeon.

Captain Kneedler, on being thus relieved, is ordered to San Diego Barracks, California, for duty.

First Lieutenant George M. Wells, Assistant Surgeon, granted leave of absence for two months, to take effect on his relief from duty at Fort Grant, Arizona.

Captain Walter D. McCaw, Assistant Surgeon, is relieved from duty at the Presidio of San Francisco, California, and ordered to Fort Ringgold, Texas.

Major Clarence Ewen, Surgeon, now on sick leave of absence, is relieved from further duty at Fort Walla Walla, Wash., and ordered to Fort Bliss, Texas.

Leave of absence for one month, to take effect on or about October 6, 1895, is granted First Lieutenant Paul F. Straub, Assistant Surgeon, San Carlos, Arizona.

So much of S. O. 202, A. G. O. Aug. 29, 1895, as relieves First Lieutenant Chas. E. B. Flagg, Assistant Surgeon, from duty at Angel Island, Cal., and assigns him to duty at Fort Hancock, Texas, is revoked.

So much of the order as directs First Lieutenant Francis A. Winter, Assistant Surgeon, on being relieved from duty at Fort Hancock, Texas, by Lieutenant Flagg, to report for duty at Fort Grant, Arizona, is amended to direct him to so report upon the abandonment of Fort Hancock.

Major James C. Worthington, Surgeon, on being relieved from duty at Fort Thomas, Ky., is ordered to Vancouver Barracks, Wash., for duty, relieving Captain William Stephenson, Assistant Surgeon.

Captain Stephenson, on being thus relieved, is ordered to the Presidio of San Francisco, Cal., for duty at that post.

First Lieutenant Alexander S. Porter, Assistant Surgeon, is relieved from duty at Fort Keogh, Montana, to take effect on the expiration of his present sick leave, and ordered to Fort Huachuca, Arizona, for duty.

First Lieutenant Frank T. Meriwether, upon the expiration of his present sick leave, will be relieved from duty at San Diego Barracks, California.

Official List of Changes in the Medical Corps U. S. Navy (Pacific Station) from August 20, 1895, to September 20, 1895.

Assistant Surgeon Middleton S. Guest, from U. S. Flag-ship Philadelphia, and to accompany insane patient to Government Asylum, Washington, D. C.

Past Assistant Surgeon J. E. Page, from "Constellation" and to Flag-ship Philadelphia, Mare Island, Cal.

Passed Assistant Surgeon J. E. Page, from Flag-ship Philadelphia, and to U. S. Naval Hospital, Mare Island, Cal.

ITEMS.

Dr. W. H. Wathen, owing to pressure of professional duties, has resigned his position as dean of the Kentucky School of Medicine. Prof. Sam. E. Woody has been elected to fill the vacancy.

Dr. John Collins Warren.—At a recent meeting of the trustees of Jefferson Medical College, Philadelphia, the honorary degree of LL.D. was conferred on Dr. John Collins Warren, professor of surgery in Harvard University.